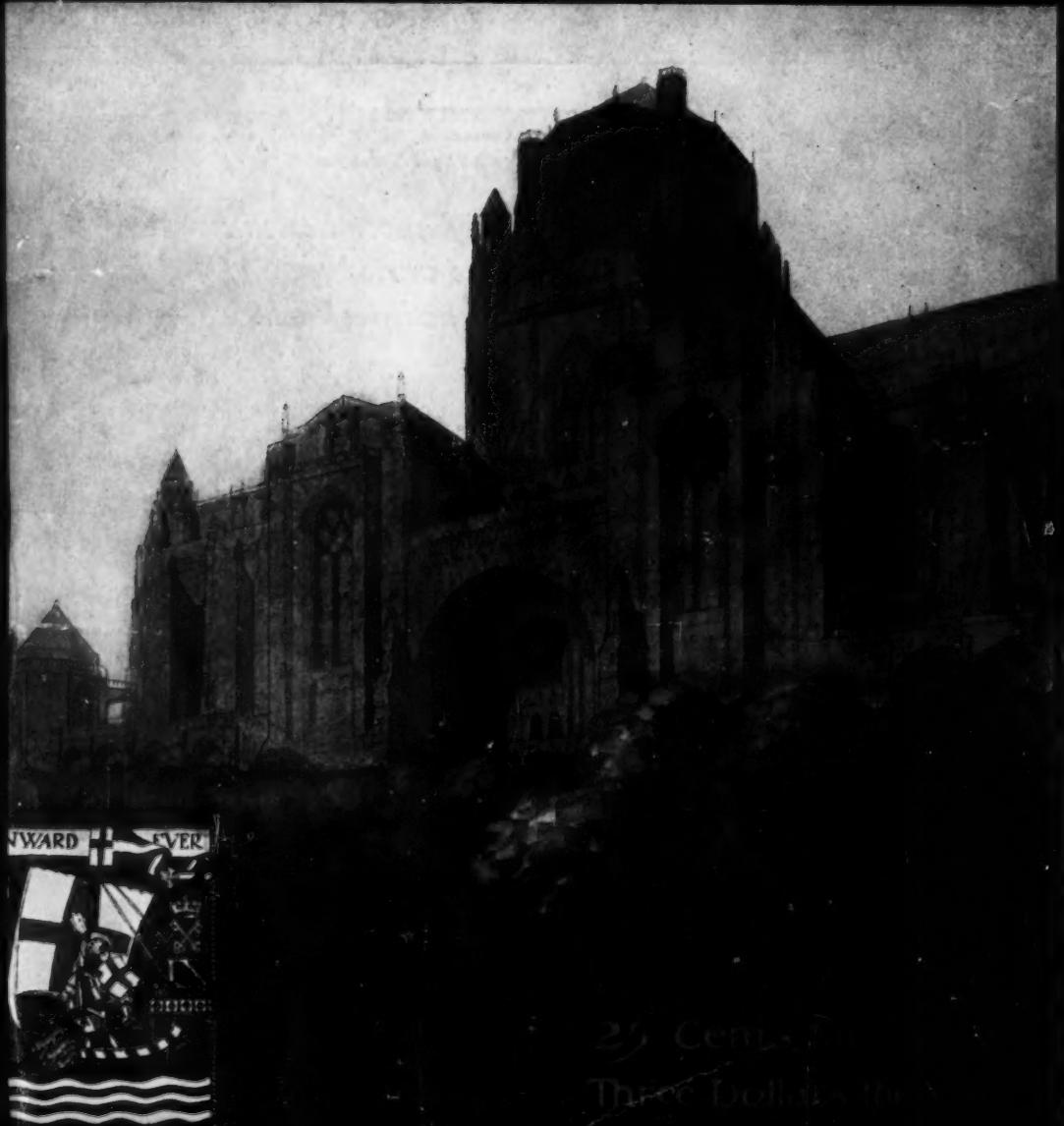


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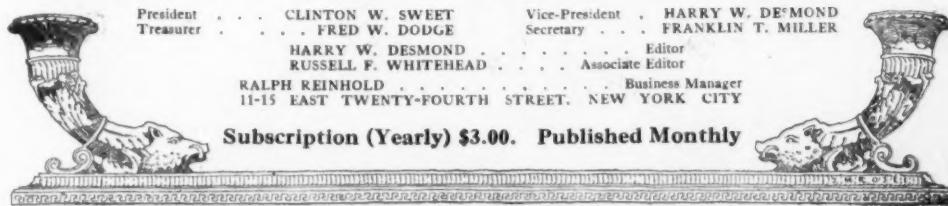
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THE ROYAL INSURANCE BUILDING, SAN FRANCISCO,
CALIFORNIA. HOWELLS & STOKES, ARCHITECTS.

THE ARCHITECTURAL RECORD

JANUARY, 1912

VOLUME XXXI

NUMBER I



THE NEW SAN FRANCISCO

ARCHITECTURAL & SOCIAL CHANGES
WROUGHT BY THE RECONSTRUCTION

By A. C. DAVID

DOUBTLESS THERE ARE many large cities which have survived calamities as destructive as that which overtook San Francisco in April, 1906; but most assuredly no city, whose ordinary economic and social life was so completely disorganized by a cataclysm, ever made a quicker or a more gallant recovery. Five years after the earthquake the city was substantially rebuilt; and it was better prepared than ever to resume the work of expansion which had been so rudely interrupted. Of course, the wound left many scars, both on the body of the city and on the lives of its inhabitants. Many promising careers were interrupted; many men were obliged to begin their business life all over again at a middle or advanced age. An element of stress and strain was introduced into a community which theretofore had put in its day's work with less effort than had any similar community in this country. The visible sign of these changes could be seen in

streets, not far from the centre of business, occupied still only by the ruins of the old city. In this sense San Francisco has not yet recovered from the conflagration of 1906. It suffered from a mutilation whose effects will never wholly disappear—not even when the generation which felt the blow shall have passed away. A new San Francisco had succeeded the old. The new city may and will regain its prosperity; but, as the result of the effort, it may lose some of its individuality.

The old San Francisco was a most winning and entertaining place—the least American of the larger cities of the United States. During its two generations of vigorous life, it had passed through many vicissitudes, all of which had left their marks upon it, and the total effect of which had been to give it an appearance and an atmosphere wholly its own. It contained a number of buildings of real architectural distinction, which had been designed and

built early in the fifties by well-trained foreigners who had not found life in the mining camps to their liking. The period of architectural good behavior passed and was succeeded by a generation whose taste and methods in building were execrable; but there was something about the city which made a sympathetic visitor forgive its sins and forget its shortcomings. The spirit of its inhabitants was not confined and stupefied by their own misbehavior. They did not take their own mistakes too seriously. The settlement of the State and the upbuilding of the city had been undertaken in a spirit of adventure, which had emancipated its inhabitants from the tyranny of Puritan scruples and from the resulting conscientious self-congratulation. San Francisco could misbehave without being corrupted by its own misbehavior. Its future was not compromised by the necessity either of approving or disapproving itself. It was buoyant, gay, entertaining, entirely willing to leave a good deal to chance, and entirely unwilling to sacrifice the present either to the past or to the future. San Franciscans could do a great deal of work with a comparatively small amount of effort and have plenty of energy left for the really serious business of amusing one another. In 1905 it looked as if with all its prospects of increasing population and business San Francisco would eventually be distinguished less as a great industrial and commercial city than as the centre of a thoroughly naturalized intellectual and artistic life. Los Angeles and Seattle might become as populous and as wealthy, but Los Angeles and Seattle were merely Middle Western cities transplanted to the Pacific Coast. San Francisco had never allowed its will to exercise an absolute dominion over its intelligence. Unlike any other American city, it had retained its freedom. It was adventurous in spirit as well as in business.

Since the disaster of 1906, and as a consequence thereof, San Francisco has assuredly changed inside and out. In the fight to recover its lost ground an element of effort and strife was intro-

duced into the life of the city which did a good deal to modify its former easy and buoyant attitude towards its own business. Individuals who had never been anxious before had anxieties thrust upon them. The whole community could not be sure in the beginning how soon the recovery would come and how complete it would be. In its anxiety San Francisco became self-conscious. Remembering as it did its former ease and buoyancy of spirit, and knowing that recovery meant above all the recovery of self-possession, it tried, as soon as the worst was over, to be gay, even in the midst of its own ruins. It made a gallant attempt, which may well have relieved many a sufferer from oppressive cares; but the attempt seems to have been forced, and its success on the whole doubtful. San Francisco could not and did not by such means recover its self-possession. Its present divided it from its past. Its citizens began to have doubts and scruples about its future. They became more conscientious. The graft prosecutions provoked hard feeling and suspicion among a group of men who theretofore had probably enjoyed a pleasanter and fuller companionship than would be found among the leading business and professional men of any large city in the world. San Francisco found that its job of reconstruction was not confined to buildings. The task of making a new city ran over into the task of making a better city; and the task of making a better city required a sacrifice of the present to the future, which did not entirely harmonize with the irresponsible gayety of its past.

The work of reconstruction was begun, and it has proceeded so rapidly that the business and shopping district has been covered with new buildings. The new buildings erected in the business district are fireproof, and, if the city should ever again be visited by a conflagration, the spread of the fire would meet with a much more effective resistance than it did in 1906. The design of these new structures compares favorably with that of the office buildings and shops erected in any city in the United



THE NEWHALL BUILDING, SAN FRANCISCO,
CALIFORNIA. LEWIS HOBART, ARCHITECT.



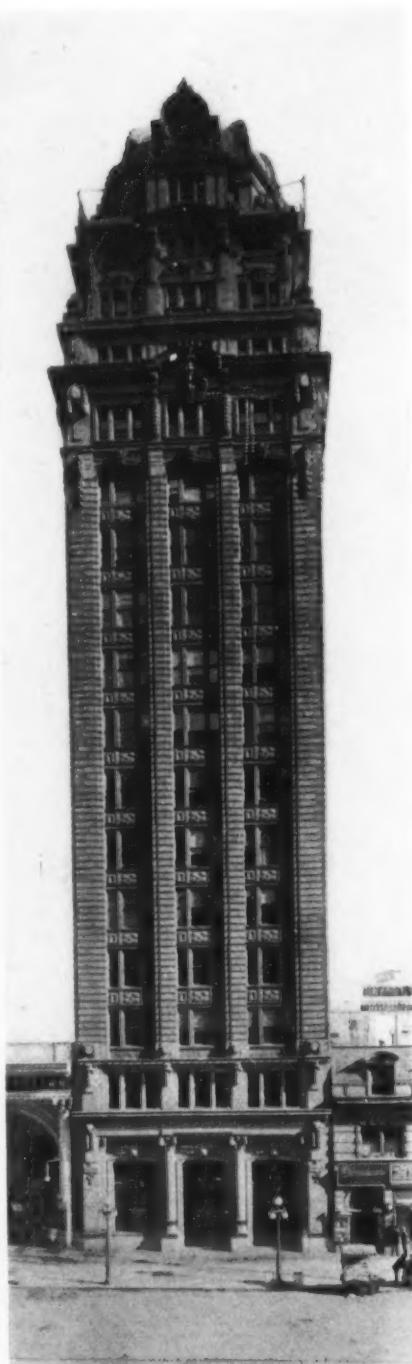
FIRST NATIONAL BANK BUILDING, SAN FRANCISCO,
CALIFORNIA.

WILLIS POLK, ARCHITECT.



THE BALBOA BUILDING, MARKET STREET, SAN FRANCISCO,
CALIFORNIA.
BLISS & FAVILLE, ARCHITECTS.

States. The average is, of course, very much higher than was the average which formerly prevailed. The local architects, who are responsible for the work, have done all that could be expected of them—particularly in view of the hurry which necessarily characterized much that they did. Yet, in spite of the fact that San Franciscans have no reason to feel ashamed of their new city, anyone who remembered the old city must feel that San Francisco has suffered some loss of individuality. The new city is good but it is good in the same way that the newer parts of Cleveland or Seattle are good. In appearance San Francisco has drawn nearer to the ordinary American city of approximately the same size and wealth. If it could have grown more slowly and had not broken so violently with its own past, it would have retained much more of its peculiarly local character. San Francisco is a better city undoubtedly than it was in 1905, but it is hardly sufficiently better to compensate its citizens and its visitors for what has been lost.



THE HUMBOLDT BANK BUILDING.
Frederick H. Meyer, Archt.

San Francisco has always had metropolitan aspirations. Its admirers claimed that the Pacific Coast had many physical and economic characteristics different from those of the rest of the United States, and that these local peculiarities, nourished as they would be on an area large enough to be an empire, would eventually result in the rearing of a genuinely metropolitan city. These claims were not extravagant. A metropolis must needs have a diversified, economic, social and intellectual life, which has been centralized in that locality by the force of economic conditions, and which combines strong local peculiarities with a more than local style and distinction. A metropolis in this sense San Francisco was and is still destined to become. But the process of becoming a metropolis cannot be hurried, and the conflagration and its results have postponed the day of consummation rather than accelerated its arrival. It forced the construction of a new city which was divided by a deep gulf from the old city, but which nevertheless could not



THE DAVIS-SCHONWASSER COMPANY BUILDING, SAN FRANCISCO,
CALIFORNIA. MACDONALD & APPLEGARTH, ARCHITECTS.

dispense with many of the worst limitations of its past.

San Francisco possesses, as much as any city in the world a metropolitan site. Its location on its hills and on the bay is unique, and it is superb. But the

little attempt was made to take advantage of the natural beauties of the location. Just before the conflagration a plan had been prepared by Mr. Burnham which was admirably designed to remove both the inconvenience and the



THE JOSEPH FREDERICKS & CO. BUILDING, SAN FRANCISCO, CALIFORNIA.
D. H. BURNHAM & CO., ARCHITECTS.

street plan of the city built on this site ignored every consideration of convenience and good looks. The streets were run straight up hills on grades which made traffic impossible; and very

essential vulgarity of the old plan. If the conflagration had never occurred, it is possible that the scheme might have been adopted and the most flagrant anomalies and mistakes of the old plan

gradually eradicated. But the losses suffered in the conflagration were so severe that the adoption of a reformed street system was considered to be economically impossible. The new city is being rebuilt on the same bad old street system, and the question of dealing with its absurdities has been postponed. During the years when Seattle, San Francisco's economic rival, has been reducing the grades of its hills and converting an over-grown village into a genuine city, San Francisco has been trying to erect a better city on an essentially bad and precarious foundation.

If San Francisco is ever to become a metropolis, it will have to break more completely with its physical past than it has yet done. Its citizens like to talk about it as the Paris of America; but French restaurants, electric lights and a prevailing atmosphere of gayety do not make a Paris. A metropolitan city must be tied together by a plan which provides for every essential economic and aesthetic need; and San Francisco still remains devoid of such a plan. Just at present it seems to be in danger of losing the charm of its earlier days without approaching any nearer to its grandiose ideal of metropolitan distinction. That in the end the city will lose its individuality and will differ from other Western cities merely in its size, its number of inhabitants, and the peculiarities of its economic enterprises the writer does not for a moment believe. When the conflagration has become a thing of the remote past, when the Panama-Pacific Exposition is over, and when the Panama Canal has brought about an inevitable increase of Italian immigration and a better supply of labor, San Francisco will begin slowly to transform itself into a real metropolis. The latent promise which it contains of a liberal intellectual and social life is so deeply rooted that it will survive the many years of stress and effort that confront the city in the effort really to better its own condition. The freedom from care which its citizens like to celebrate as in some way characteristic of San Franciscan life will have to be earned somewhat effectually in the future than

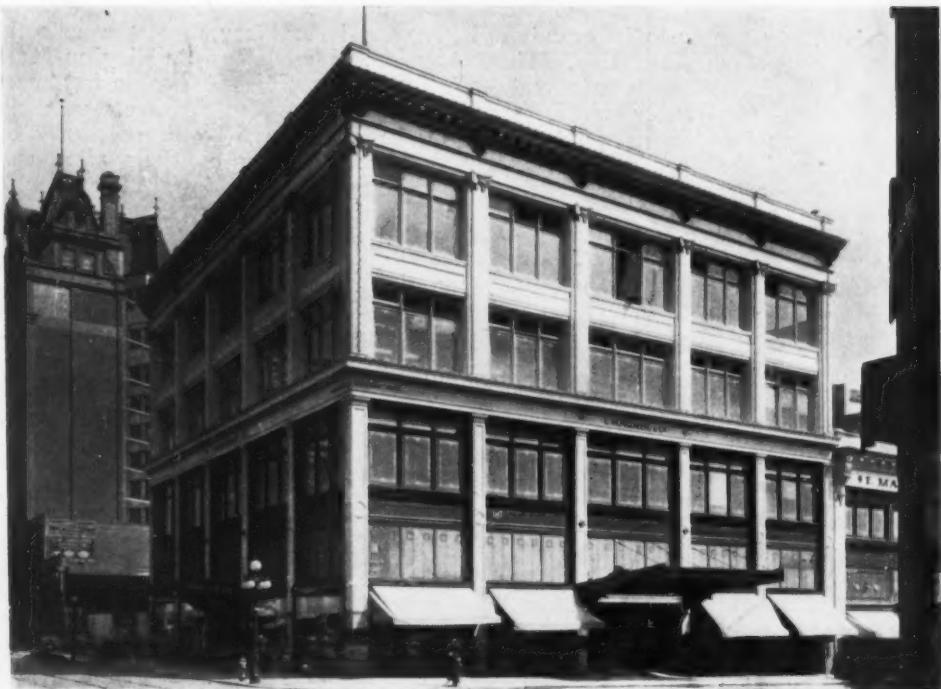
it has in the past; but no one who has felt the pulse of the typical San Franciscan can have much doubt as to the result.

In the meantime, the new buildings which the city will have to show to its visitors in the year of the Panama-Pacific Exposition will be creditable both to the city itself and to their architects. They are characteristic of the best tendencies prevailing in the design of modern American commercial buildings. The number of skyscrapers is comparatively few. With so much building going on the city could not afford to build very high on very many sites. But few as they are, they are characterized both by certain negative and positive merits. They are all of them business-like structures, admirably adapted to their practical uses; and they all of them conform to the standards which common sense has all over the country imposed upon the appearance of such edifices. There is not one aberration among them. Ornament is sparingly used and generally with effect. There are a few conspicuous successes. The First National Bank Building, designed by Willis Polk, for instance, is in every respect excellently handled. The Balboa Building on Market Street of Bliss & Faville is almost equally good. The architects were in this case hampered by the necessity of breaking the lines of their piers and providing the two lower floors with glass shop fronts; but the rest of the design is admirable, both in the balance of the composition and in the detail. The Newhall Building by Lewis Hobart is more ornate, but its ornament is justified by the good taste and discretion with which it has been applied. All of these buildings have scale, in so far as a structure with the dimensions of a skyscraper can have scale. Their vertical lines are emphasized, but they do not pretend to be towers. The Humboldt Bank Building, on the other hand, is a tower; but, unfortunately, it has not been very well managed. The design of the crowning stories is confused and the base is weak.

The new shops are much more numerous than the new office buildings; and



THE CITY OF PARIS BUILDING, SAN FRANCISCO, CAL.
Clinton Day, Architect.



A RETAIL STORE—I. MAGNIN CO., SAN FRANCISCO, CAL.
Wm. Mooser, Architect.

they have on the whole been unusually well designed for this class of building. Retail storekeepers all over the United States do not as a rule keep much good architecture in stock; but in San Fran-

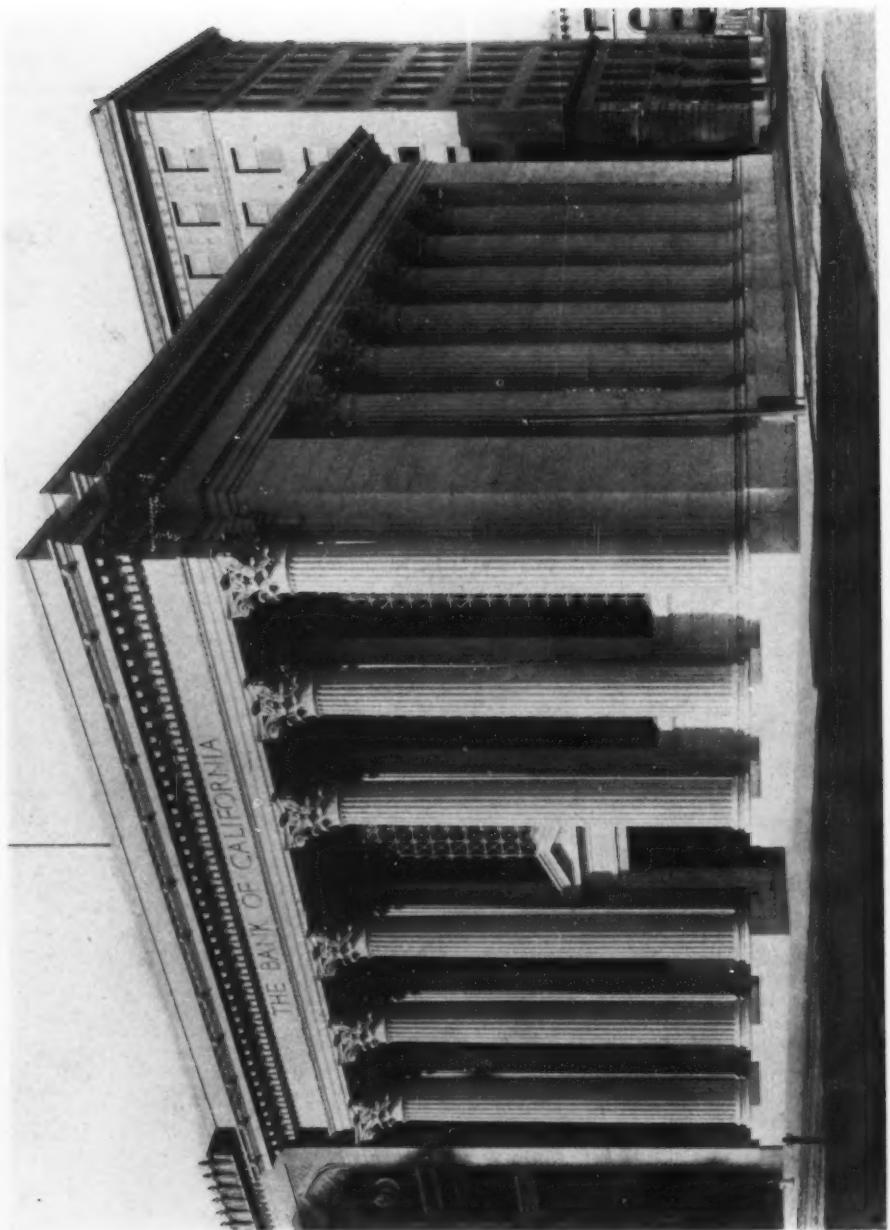
ally sacrificed to the necessity of obtaining abundant light for the upper stories. In these cases, however, the sacrifice is frankly made. Architectural style having been excluded by the front door, no



THE A. M. ROBERTSON BUILDING, UNION SQUARE, SAN FRANCISCO, CALIFORNIA.
A. B. FOULKES, ARCHITECT.

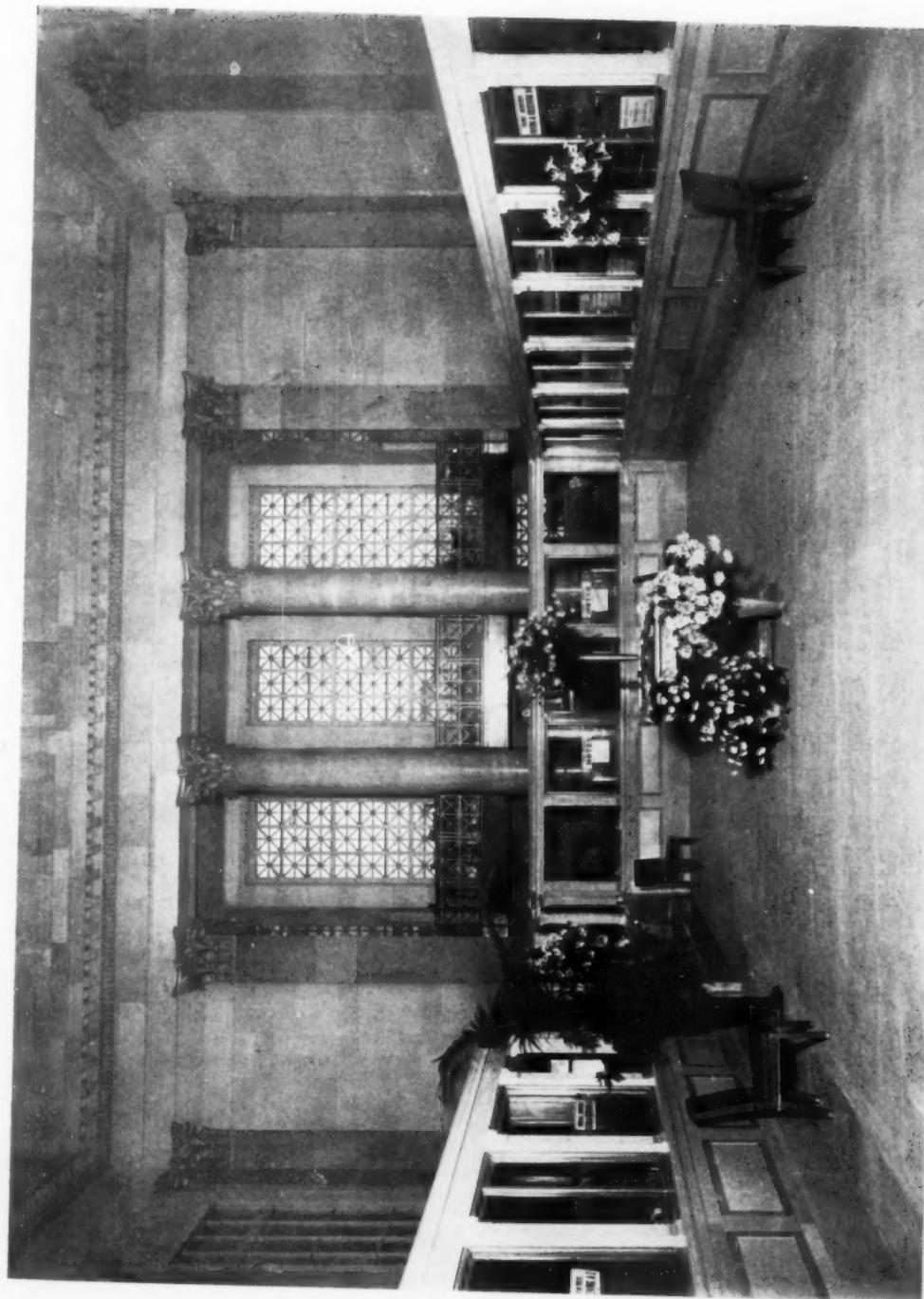
cisco a real attempt has been made to obtain new stores that are inoffensive and thoroughly practical, in case they are not really good-looking. They are from three to seven stories in height, and the scale of the composition is usu-

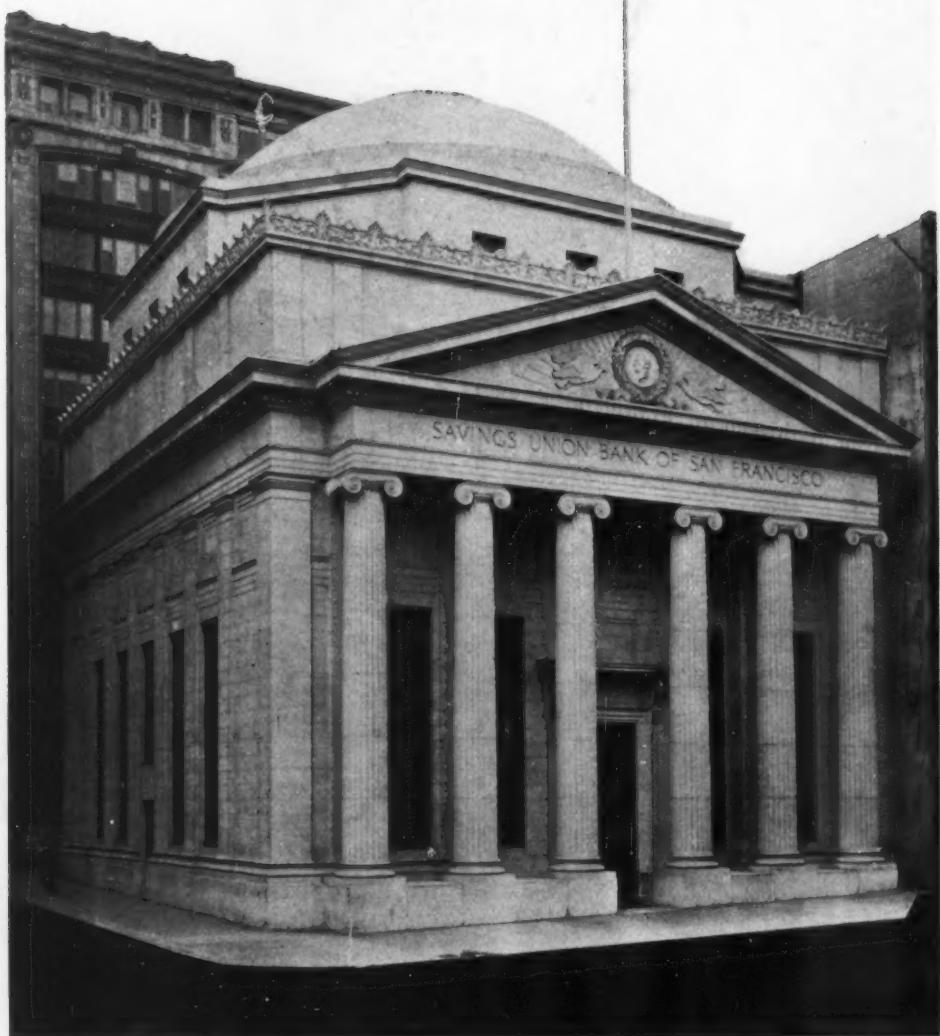
attempt is made to let it in by a side entrance. A good example of a comparatively ornate building is that of Davis, Schonwasser & Co., designed by MacDonald & Applegarth. This edifice is only three stories high and occupies a



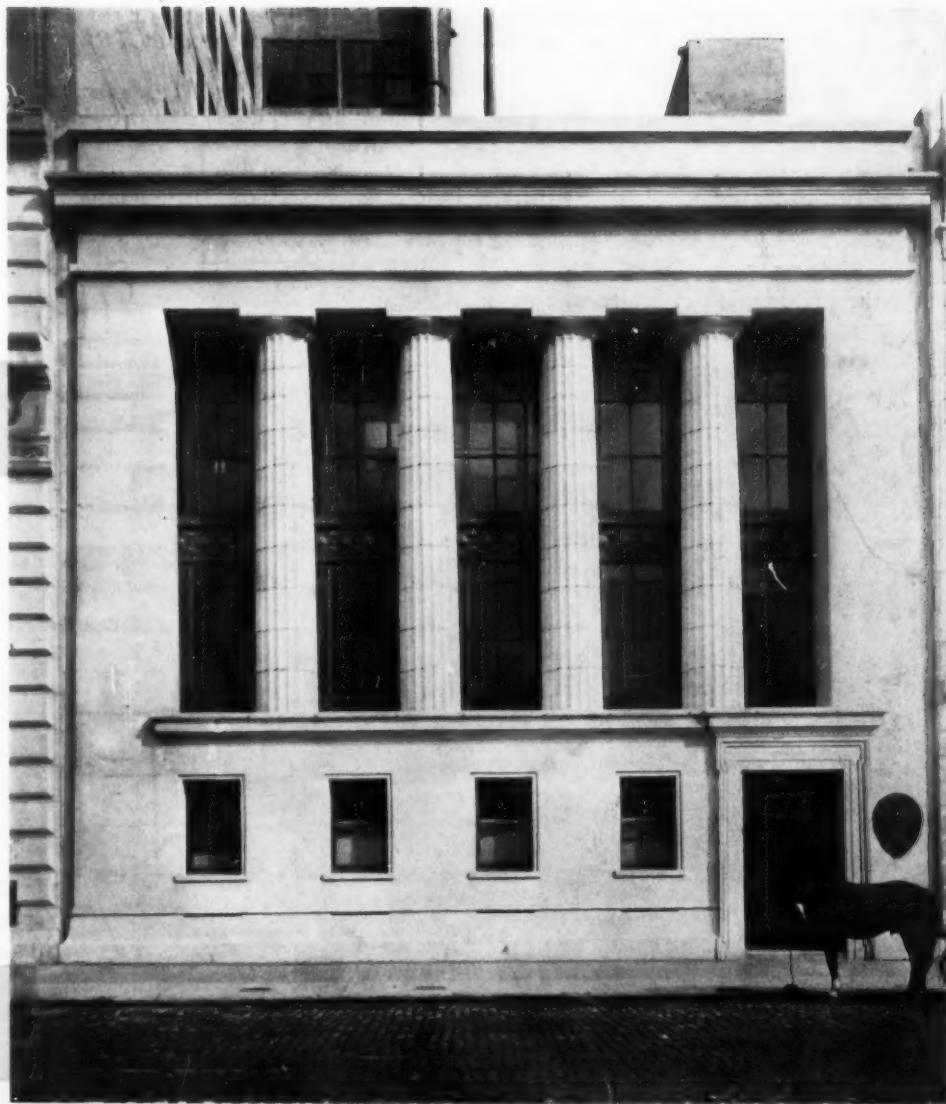
THE BANK OF CALIFORNIA, SAN FRANCISCO,
CALIFORNIA. BLISS & FAVILLE, ARCHTS.

THE BANK OF CALIFORNIA, SAN FRANCISCO,
CALIFORNIA. BLISS & FAVILLE, ARCHTS.





THE SAVINGS UNION BANK OF SAN FRANCISCO, SAN
FRANCISCO, CAL. BLISS & FAVILLE, ARCHITECTS.



OFFICE BUILDING OF BALFOUR, GUTHRIE & CO, SAN
FRANCISCO, CAL. BLISS & FAVILLE, ARCHITECTS.

whole block front. The architects were able, consequently, to throw the two upper stories into a colonnade. The lower story, consisting as it necessarily does, chiefly of plate glass, makes a weak support for such a large order; but it is not necessary to push this objection very hard. The order does not, as a matter of fact, look very heavy, and the plate glass is provided with plain and comparatively solid frames. Consequently, while the building is not impeccable as a matter of design, it constitutes a fair

er stories than does any more complicated and pretentious method of treatment. Another good example of a severely plain and frank treatment is to be found in the warehouse of the Tillman-Bendell Company, designed by Messrs. MacDonald & Applegarth. Finally, the book store of A. M. Robertson is worthy of remark as a very discreet example of the small shop which solicits attention by being modestly but somewhat self-consciously different from its neighbors and prototypes.



THE UNION TRUST COMPANY BANK, SAN FRANCISCO, CALIFORNIA.
Clinton Day, Architect.

compromise between severe practical and aesthetic demands. Another comparatively ornate store is that of Jos. Fredericks & Co. While it possesses no great distinction, it is competently and carefully designed. The shop of the Baldwin Jewelry Company, by Bliss & Faville, has fewer architectural trappings but is one of the best of the simpler and franker buildings. The open and unadorned treatment of third, fourth, fifth and sixth stories harmonizes better with the two plate glass low-

Since the earthquake, a number of banks, private banking firms and insurance companies have erected low buildings for their own exclusive use; and some of these are unusually successful. Of these the most conspicuous success is that of the Bank of California, of which Bliss & Faville were the architects. The design of this building manifestly owes something to that of Knickerbocker Trust Company in New York; but a comparison between the treatment of the colossal orders in these two struc-



THE HOME TELEPHONE COMPANY BUILDING, SAN FRANCISCO,
CALIFORNIA. COXHEAD & COXHEAD, ARCHITECTS.



THE MECHANICS INSTITUTE—SAN FRANCISCO,
CALIFORNIA. ALBERT PISSIS, ARCHITECT.



ALASKA COMMERCIAL BUILDING, SAN FRANCISCO,
CALIFORNIA. MEYERS & WARD, ARCHITECTS.



THE N. W. HALSEY & CO. BUILDING—CALIFORNIA STREET—
SAN FRANCISCO, CAL. N. F. WOODRUFF, ARCHITECT.



THE TILLMAN & BENDEL WAREHOUSE, SAN FRANCISCO, CAL.
MacDonald & Applegarth, Archts.



THE NEW ZEALAND INSURANCE CO. BUILDING, SAN FRANCISCO, CAL.
Curlett & Sons, Architects.

tures will, we believe, leave a balance in favor of the San Francisco rather than the New York building. Messrs. Bliss & Faville have studied the central idea more thoroughly, brought it to a completer expression and stripped of unnecessary accessories. They have also had the advantage of a climate in which

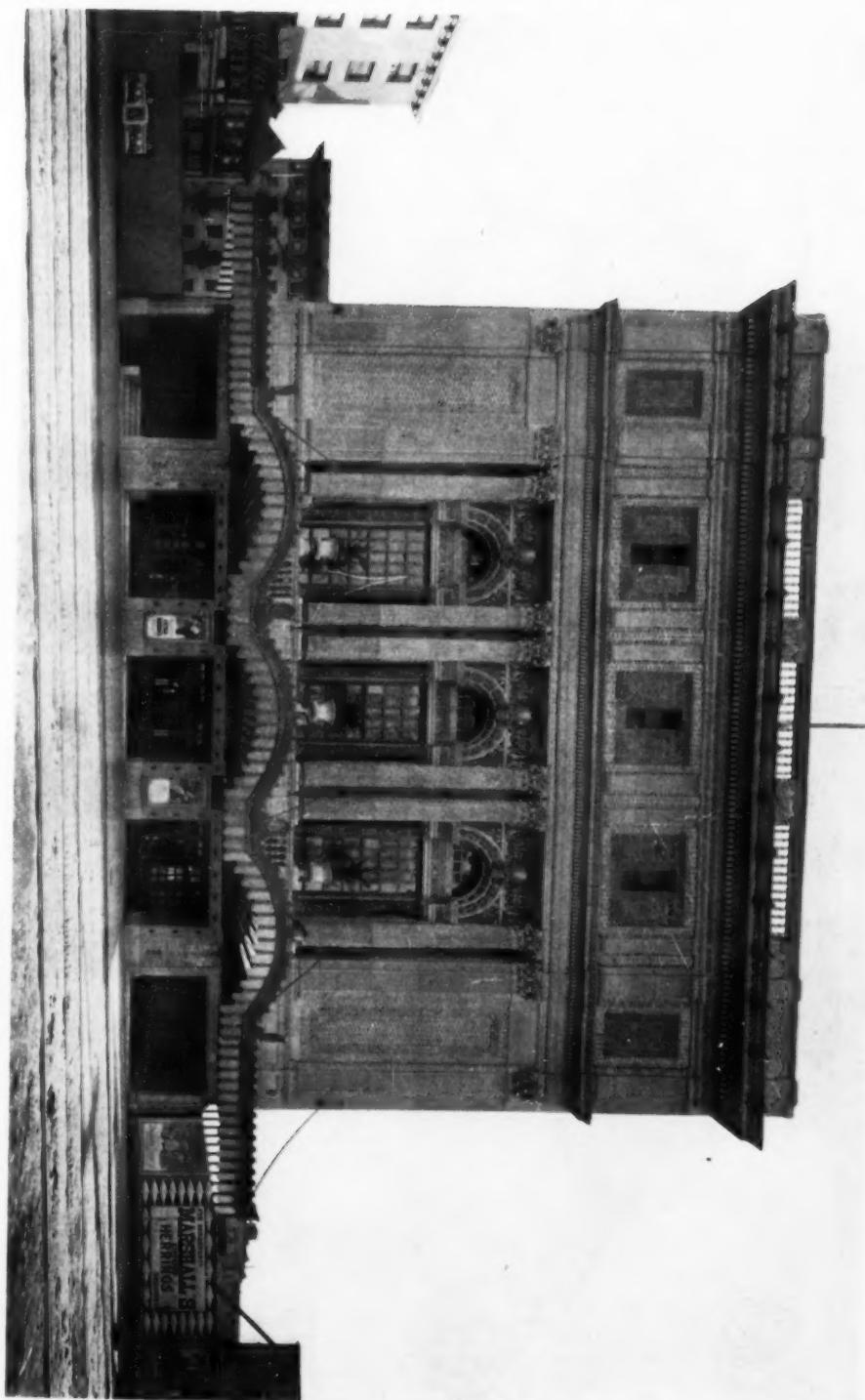
place them next to the buildings of the Metropolitan Life Insurance Company and the Union Trust Company in order to remark the difference between the real thing and the imitation. The office building of Balfour, Guthrie & Co. is a thoroughly respectable performance of its kind, but the virtuous plainness and



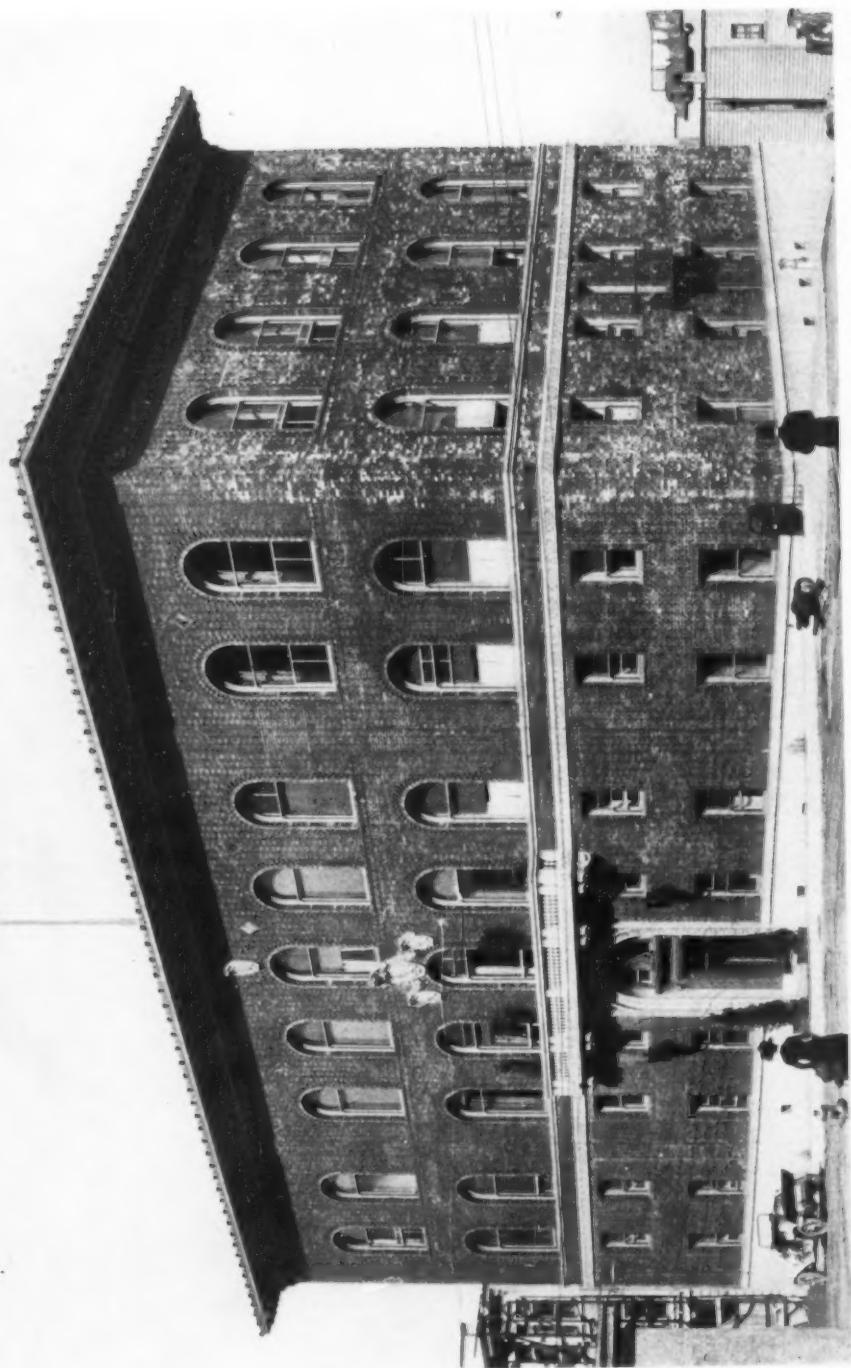
THE ORPHEUM THEATRE, SAN FRANCISCO, CAL.
Landsberger & Joseph, Architects.

the marble becomes mellow with age instead of merely dirty. A bank office so good as this would be a credit to any bank in any city in the world. Another very carefully studied design is that of the Savings Union Bank. The architects of these two buildings unquestionably have an unusual talent for purely monumental work. One has only to

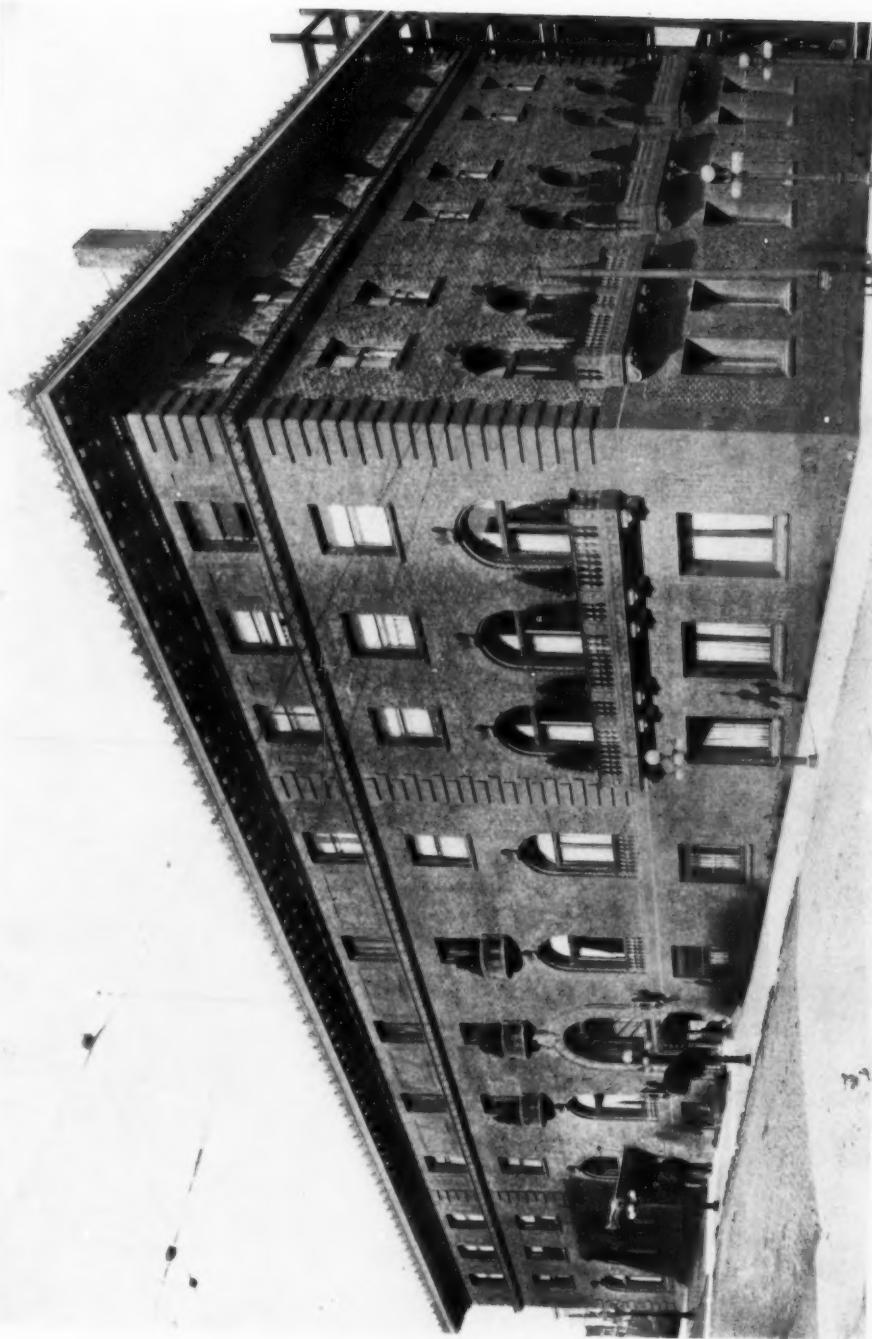
simplicity of this façade is rather too conspicuous. The dimensions of the lot and building did not permit the architect to do a really big thing and he was scarcely justified in rejecting so completely the help which he might obtain from a somewhat more ornamented design. A much more interesting and original structure is that of the Home



THE COLUMBIA THEATRE, SAN FRANCISCO,
CALIFORNIA. BLISS & FAVILLE, ARCHTS.



THE UNIVERSITY CLUB, SAN FRANCISCO,
BLISS & FAVILLE, ARCHITECTS.
CAL.



THE BOHEMIAN CLUB, SAN FRANCISCO,
CAL. GEORGE W. KILHAM, ARCHT.

Telephone Company, designed by Coxhead & Coxhead. In no other office building in this country, so far as we know, has the architect been allowed to use such deep walls; and the effect of these reveals, injurious as they may be to the light of the offices, is very powerful. The building is not beautiful, but it is strong, compact and dignified. It was a daring thing to do, and it was worth doing.

Of the two new theatres illustrated herewith one, the Orpheum, proclaims itself rather too loudly as a leading place of amusement in the Paris of America. The design has some merits, but its cleverness merely emphasizes its bad taste. The Columbia Theatre, on the other hand, is thoroughly good, at least in design. As is usual with the work of these architects, its different elements are well selected and thoroughly composed; and it is festive in appearance without being frivolous. An elab-

orate attempt to decorate the façade with glazed and colored terra cotta is successful in part, but only in part. This material has undoubtedly great possibilities, because it enables the architect to unite color with decorative detail and the play of light and shade. But the secret of its entirely successful use has not yet been discovered. One of the few new San Franciscan buildings erected by a New York firm is the Palace Hotel, of which Messrs. Trowbridge & Livingston were the architects. There is not much to be said about the exterior, but the interior has been excellently planned, and certain of its rooms have been designed with propriety and effect. On the whole, there is no hotel in the country outside of New York and Chicago in which better taste has been displayed; and when San Francisco becomes a metropolis, it will be able to boast of at least one metropolitan hotel.



THE PALACE HOTEL, SAN FRANCISCO, CAL.
Trowbridge & Livingston, Architects.



The Cathedral Church of Liverpool

G. Gilbert Scott, Architect

By Wilberforce Dorefield



ALMOST A HUNDRED years have lapsed since a Cathedral was first projected for Liverpool—it was then condemned, happily, as a waste of money on a pile of useless and superstitious masonry. Again it revived as an idea in 1870 and even went so far as the selection of a design—this again was left on paper. The present design for the Cathedral was competed for and selected in 1903. The work on the site began in 1904, and in the July of the same year the late King Edward VII. laid the foundation stone. The plan shows a choir and nave—each of three aisled bays, joined together by a great unencumbered preaching space, 80 by 200 feet, with four transepts, two on either side, and crowned with a great octagonal lantern. The public entrances are from the transepts, and the west end. To the east are two stories of vestries lying outside the main walls. From the South Choir Aisle entrance is gained to the Lady Chapel Gallery and thence by a stair the body of the Chapel. The

North Aisle of the Choir gives access to the Octagonal Chapterhouse.

The site, 1,020 by 248 feet, is situated on the crest of one of the sandstone ridges which stand on the background of the curved slope on which the city of Liverpool is built. In the eighteenth and early nineteenth centuries the site was partly used as a quarry, then the highest part was levelled and built on, the quarry itself becoming a burial ground. The Cathedral itself is placed at one side of an open space of twenty-two acres, surrounded by roads and houses. On its northern side is a well wooded slope which drops fifty feet to the graveyard below; this with its trees and gravestones makes a charming setting for this elevation of the Cathedral. Owing to the position of the site and the graveyard, it has not been possible to give a correct orientation. The Cathedral lies north and south—the north corresponding to the liturgical east. In describing the church the customary

liturgical nomenclature has been adhered to in defiance of the compass.

The Lady Chapel is the only part at present completed; the Choir and Chapterhouse are now in course of construction; the eastern pair of transepts are to be taken in hand shortly. The work is so far advanced that it is possible to gain something of the ultimate effect. The Choir consists in plan of three aisled bays, forty-one feet centre to centre; to the east is a shallow blank bay to form the Sanctuary—the two western bays on either side are shut off from the aisles by solid walls; against these will abut the stalls. The organ is divided into three parts, the bays on either side at the entrance to the Choir being vaulted at a low level to form two organ chambers. The two remaining eastern bays have high pierced stone parclose screens.

The piers of the Choir do not stand free, each aisle bay being shut off from the next by a solid wall connecting between the pier and the aisle wall, forming in reality recesses pierced at the floor level by low arches to admit of passage.

To the east of the altar outside the main wall is a hall or ambulatory for the marshalling of the choir and giving entrance to the various vestries. This is lighted by four two-light windows high up overlooking the roofs of the vestries and vaulted with a curious ribbed barrel vault. At either end high under the vault are semi-circular corbelled out balconies for spectators. Across the width of the Sanctuary and the ambulatory the aisles continue and are vaulted at the same height and with a vault similar to that under the organ chambers. They are lighted by circular windows at their eastern end. The aisles and the ambulatory admit of a continuous passage outside the Choir. The accustomed order of arch triforium clerestory is not to be found. The aisle wall is carried up to the same height as that of the Choir and in each bay is pierced by a wide two-light window, the sills being forty-one feet from the floor. Some ten feet down below the sills is a narrow walking way tunnelled in the thickness of the wall and lighted from the exterior by narrow loopholes. On either side of the curtain

walls, shutting off bay from bay, are small doors which, opening on to corbelled walking ways, continue to the centre where the wall is pierced by low, narrow arches, admitting of passage from bay to bay, and giving access to the organ chambers.

The aisle windows are of simple form—two 6-foot 10 $\frac{3}{4}$ -inch lights without cusping; over in the heads are circles with undercut cusping. On either jamb are figures cut in the solid with the stone work. The aisles are vaulted with a barrel vault divided into three panels by ribs. The internal label moulds of the windows die into the wall rib at its apex and are brought down to within a foot or so of the springing line, then go off horizontally until they again meet the wall rib.

Over is the triforium of the same width as the aisles and like them, barrel vaulted. Shutting it off from the church is a pierced breast high stone screen; high in the wall at the back are slits, small, so as to admit but little light, just sufficient to make the darkness visible and so accentuate the gloom and mystery.

At this level springs the big vault of the Choir, eighty-four feet above the nave floor. The vault is quadripartite: the great transverse ribs are heavy and much moulded, on them being built walls to act as roof trusses. On plan the Choir bays are almost square and for vaulting are divided into two—a new respond being developed over the apices of the arches—so that each single bay of the Choir will have two bays of vaulting. The sill of the east window is higher by five feet than those of the aisle windows. From jamb to jamb it is 36 feet; from cell to apex, 76 feet, and is divided into four lights. On either side over each pair is a cusped circle, 11 feet 6 inches in diameter, and in the apex of the arch a smaller one. Like the aisle windows this has no cusps in the heads of its four lights. The centre mullion on the interior and on the exterior is decorated with sculpture; under will be a reredos of the same red-stone as the Cathedral reaching up to the sill. All the interior fittings of the



PERSPECTIVE VIEW OF THE NORTHERN ELEVATION, FROM
THE GRAVEYARD—THE CATHEDRAL CHURCH OF LIVERPOOL,
LIVERPOOL, ENGLAND. G. GILBERT SCOTT, ARCHITECT.

Choir, the organs woodwork, glass and embroidered hangings, have already been given as memorials and also the marble floor and steps.

At the entrance to the Choir are three steps, at the third bay three, and at the foot of the altar are more, making eight, not including those leading up to the footpace. In the western Choir arch will be the third part of the organ, carried on a single arch springing low down from its piers. This will in no way impede the congregation's view into the Choir but will be a modification of the

usual close screen dividing a Cathedral church into nave and Choir, the Choir being properly the Chapel of the Canons for the performance of the Divine Office in the mediæval arrangement. The interior is planned and will be well fitted for carrying out the offices in a dignified and stately way—not a study in dry as dust archæology or liturgical absurdity, nor yet displacing the good and laudable customs gathered from the ages. The large open spaces gently leading up by low wide steps to the altar, the supreme point of the Christian church, will have

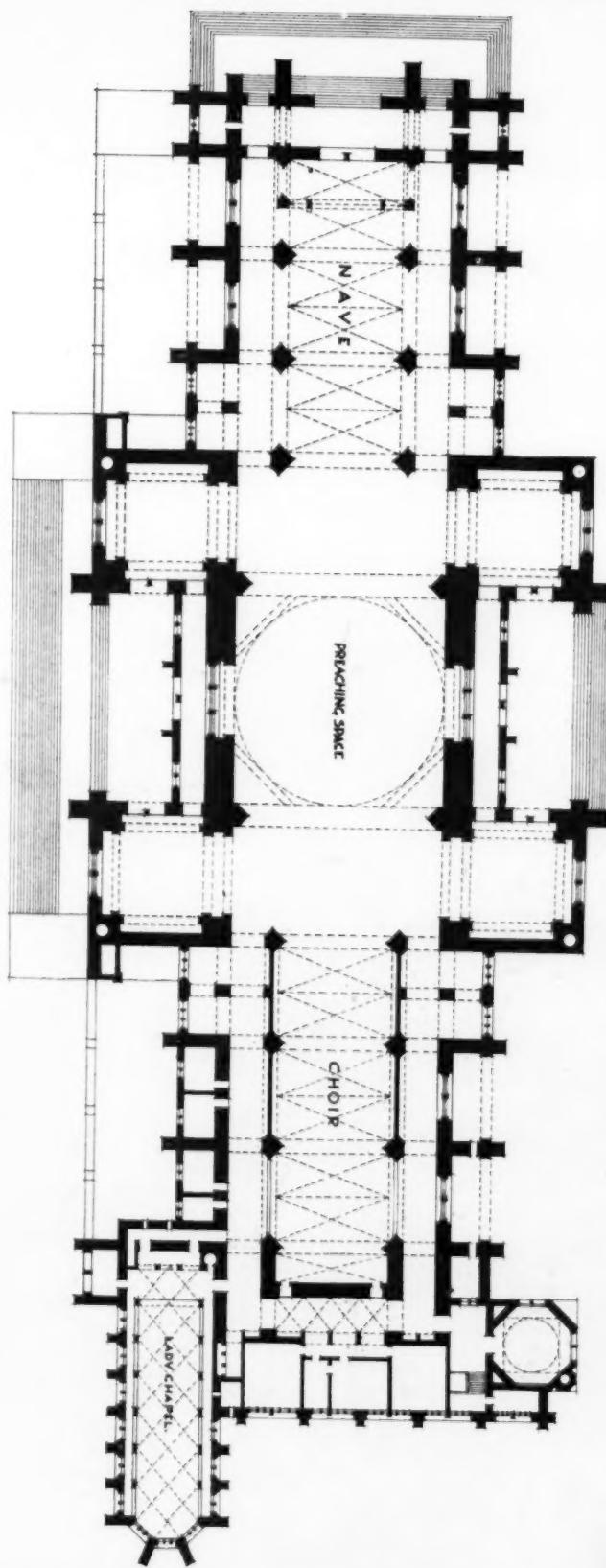


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EASTERN ELEVATION—SHOWING LOWER PART OF CHAPTER HOUSE ON THE RIGHT—LIVERPOOL CATHEDRAL. G. G. SCOTT, ARCHITECT

LIVERPOOL. CATHEDRAL.

G. G. SCOTT, ARCHT.
7, GRAYS INN RD, WC.



PLAN—THE CATHEDRAL CHURCH OF
LIVERPOOL. G. GILBERT SCOTT, ARCHT.

100 FEET. 90 80 70 60 50 40 30 20 10

SCALE OF FEET.



EASTERN AMBULATORY FROM THE TOP.

AMBULATORY AT BACK OF ALTAR—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. Gilbert Scott, Architect.



SOUTH TRIFORIUM LOOKING WEST.

infinite dignity—a modern exemplar of what a Cathedral can and should be, not for concerts or amusements, a mere place of entertainment, but a house of God so impressive and all-embracing as without other means to bring men naturally to their knees and their thoughts to prayer. By contrast it will show that modern man is just as capable as his forefather of producing a vast monument dedicated to religion that shall be at once beautiful, inspiring and chaste and not merely of the prettily picturesque order.

The exterior is simple; one might almost say severe; for many feet from the ground up it is unbroken wall, save for the base mould and buttresses; then it is cut by a parapetted walking way at the same level as that of the interior with which at various points it connects. This walking way passes in front of the east window and runs around the whole Choir.

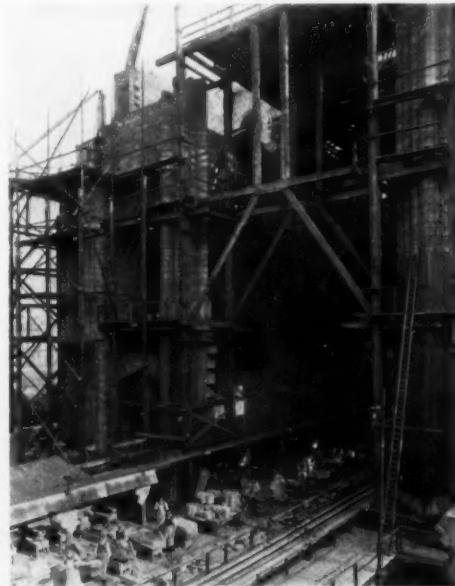
The jambs of the aisle windows are rounded and on them die the arched head moulds, the label moulds finishing on boldly projecting beasts. On the jambs and centre mullions, which have the form of buttresses three parts of

their height, are figures carved from the solid.

Next over, comes a covered walking way at the triforium level—a small arcade of five arches in each Choir bay and at their level the buttresses terminate in labelled heads and sculptured figures. The wall is continuous up from the inner side of the walking way and rises without break to the parapet, save for the slits lighting the triforium. On either side of the east window are stair turrets capped with extinguishers giving access to the various levels.

The curved exterior surface of the aisle vault is exposed, asphalted, and will form the roof, the pockets acting as gutters to carry off the water. The Choir is to have a copper roof carried on fireproof construction.

The Chapterhouse is on plan an unequal octagon of four large and four small sides rising from a square base. In the basement is the Song School on the level of the Choir vestries. The actual Chapterhouse is at the same level as the north aisle; the windows are in the short sides. From the wide blank sides springs the vault, forming a square which rising is pierced by a 22-foot



CHOIR ARCH FROM PREACHING SPACE.



BASE OF S. E. PIER OF THE N. E. TRANSEPT.

circle, 45 feet above the marble floor. This is open showing the oak rafters of the conical roof. The walls will be panelled to the cell level with oak, and under the vaulting corbels will be carved on the stone large coats of arms with crests and mantelling.

The exterior is without buttresses. On the northeast side is an octagonal stair turret connecting the various levels. The roof is covered with stone slates and capped with a curiously wrought finial of copper.

The Chapterhouse is the gift of the Freemasons of Liverpool in memory of their Past Grand Master, the Earl of Lathom, and would seem by its form and structure to symbolize the craft.



SOUTH CHOIR AISLE LOOKING EAST.

The Lady Chapel is the only part of the Cathedral at present completed and contains for the while the Cathedral of the Bishop. It lies on the south side projecting beyond the eastern wall of the Choir and is in the form of an apsidal parallelogram, with low, narrow lateral aisles, used only as passage ways and seats three hundred people. The entrance is from a porch opening under the gallery at the west end on the right. There are two galleries, one over the other, the first carried on a wide single arch round which is carved an inscription recording the dedication and the names of the families who largely gave the money for the erection of the Chapel. This gallery is for congregational use; over comes the other, containing the organ and organist. It is carried on three



GREAT TRANSVERSE RIB OF THE CHOIR.

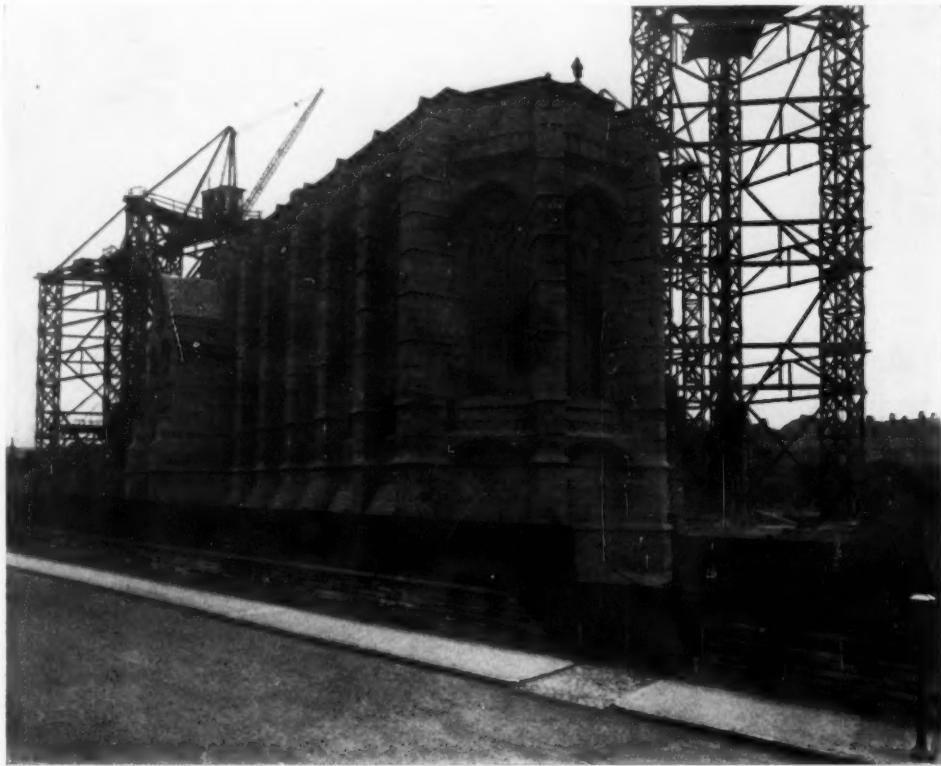
slender arches and has a projecting parapet of carved and panelled oak. At the back of the organ from the floor to the apex of the vault and from side to side is oak panelling which acts as a sounding board, aiding without doubt the splendid acoustic properties of the Chapel. On either side up to the apse is a narrow gallery or walking way opening from and at the same level as the first gallery. A solid parapet with a coping of boldly carved lettering carries an open stone screen with cusped heads crowned with a tall, delicate pierced stone cresting, and shuts it off from the Chapel. Projecting from the cornice are small, winged figures carrying musical instruments, no two of which are alike. The

side windows of two lights are set in the aisle wall; the piers are continued across the gallery and are cut by small arches to permit of passage—somewhat similar to the aisles of the Choir.

The vault is a ribbed and groined barrel with carved bosses, a subsidiary rib being developed to form great quatrefoils at the intersections. The floor is of marble, second statuary and Alpine

with figures climbing about in it, which continues through all the windows, springing from the feet of Our Lady in the central window of the apse; through the heads on scrolls runs the Magnificat.

The windows at the west under the gallery and on the staircase contain busts of eminent English women of modern times, Queen Victoria, Grace Darling, etc. The main windows are the gifts



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LADY CHAPEL FROM THE EAST—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. G. Scott, Architect.

green, left dull and laid in large alternating slabs; across the Chapel at the piers are bands of the same marbles, cut into patterns.

The Chapel is a memorial of holy women; the side and apse windows are filled with female saints, one to each light, and either in their hands or in the background are views or models of the Abbey or Cathedral where each was particularly venerated and where the shrine formerly stood. Below them is foliage

of various people; they bear no laudatory texts—a coat of arms and the name of the family commemorated, simply exposed on a scroll, set in the lower part of the lights, almost hidden from the main floor. The glass is by Powell of Blackfriars, London. It is modern in the best sense and has much of the charm of ancient glass in its variety and its color, but in design is by no means of any period, save the present.

The altar is raised by five low, wide

steps above the main floor level. It is twelve feet long and has a series of frontals of the proper colors, designed by Mrs. C. G. Hare of Grays Inn Sq., London, and worked by the ladies of Liverpool and is backed by a carved and painted oak tryptich. The prevailing color is blue in two shades as being proper to a Lady Chapel, with touches of emerald green. The carving is solidly gilt, and the mouldings are picked out with gold and

them try to appear what they are not—merely homely bulbs honestly placed. They and the rest of the hardware and door furniture are by Bainbridge Reynolds of London.

The Choir furniture, sedilia, etc., is of English oak from the shops of the general contractor, except the tryptich, and was carved by Mr. J. H. Phillips, who is also responsible for much of the stone carving. It is solidly constructed with



LADY CHAPEL VAULTING FROM THE TOP—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. Gilbert Scott, Architect.

black. The figures are also painted in proper colors and are very charming examples of the modern woodcarver's art.

One must not forget the lighting fixtures for they are not of the least of the charms of the Lady Chapel. They are of iron, painted and gilded, in the form of ostensoria, depending from the high vault by long chains. No attempt is made to hide the bulbs by shades of colored glass or other material, making

mason joints and put together with pegs. The finish is a silvery gray, produced by a treatment with lime, which also slightly roughens the surface. This gives it a character in keeping with the rest of the Chapel.

On the exterior, the Chapel rises from a solid weathered base, projecting just beyond the face of the buttresses. On the south side to the west is the large vaulted two-storied porch. It is entered

by a flight of steps leading up from the street through a low, wide arch. The next story is divided into two open arches, a pier being built over the apex of the lower arch. This rises to a considerable height and has a little below the centre a pair of niched figures, carved from the solid. Through these arches is seen high up the oak boards, rafters and crested purlins of the roof. The ex-

sides, dying on the jamb moulds. The buttresses terminate in gable heads, set in which are shields bearing various devices. Then again just below the parapet and over the buttress heads comes another parapetted walking way at the same level as the first on the Choir and that round the roof of the Chapterhouse. These are all connected together by a bridge or other means and allow of con-



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LADY CHAPEL VAULTING—THE CATHEDRAL CHURCH OF LIVERPOOL.
G. G. Scott, Architect.

terior is covered with stone slates like the Chapterhouse.

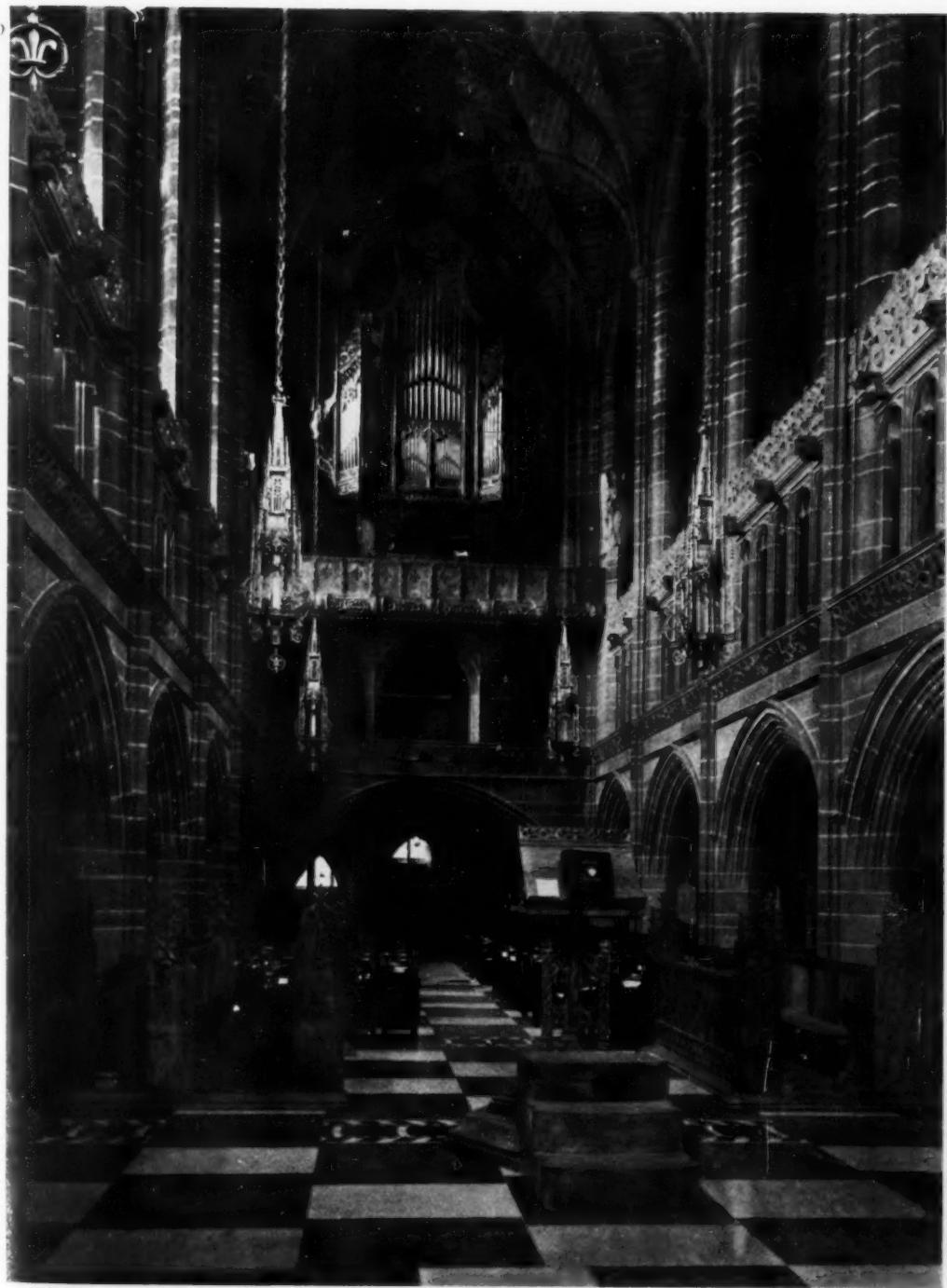
Piercing the buttresses and at the same level as the interior lower gallery is a walking way running from the porch gallery or tribune, carried on arches round the apse and circumambulating the exterior of the Chapel. The windows fill the entire space between the buttresses, whose small, frequent face weatherings are continued down the

timous passage. The roof over the vault, invisible except from above, is of English oak, covered with copper. The stones used in building are red sandstones of various hues from several different local quarries. The prevailing tone is a dull red—in some lights it becomes pink—and the gray mortared half-inch joints, yellow. The whole of the cutting, the mouldings and the facing is done by hand, saws being the only ma-



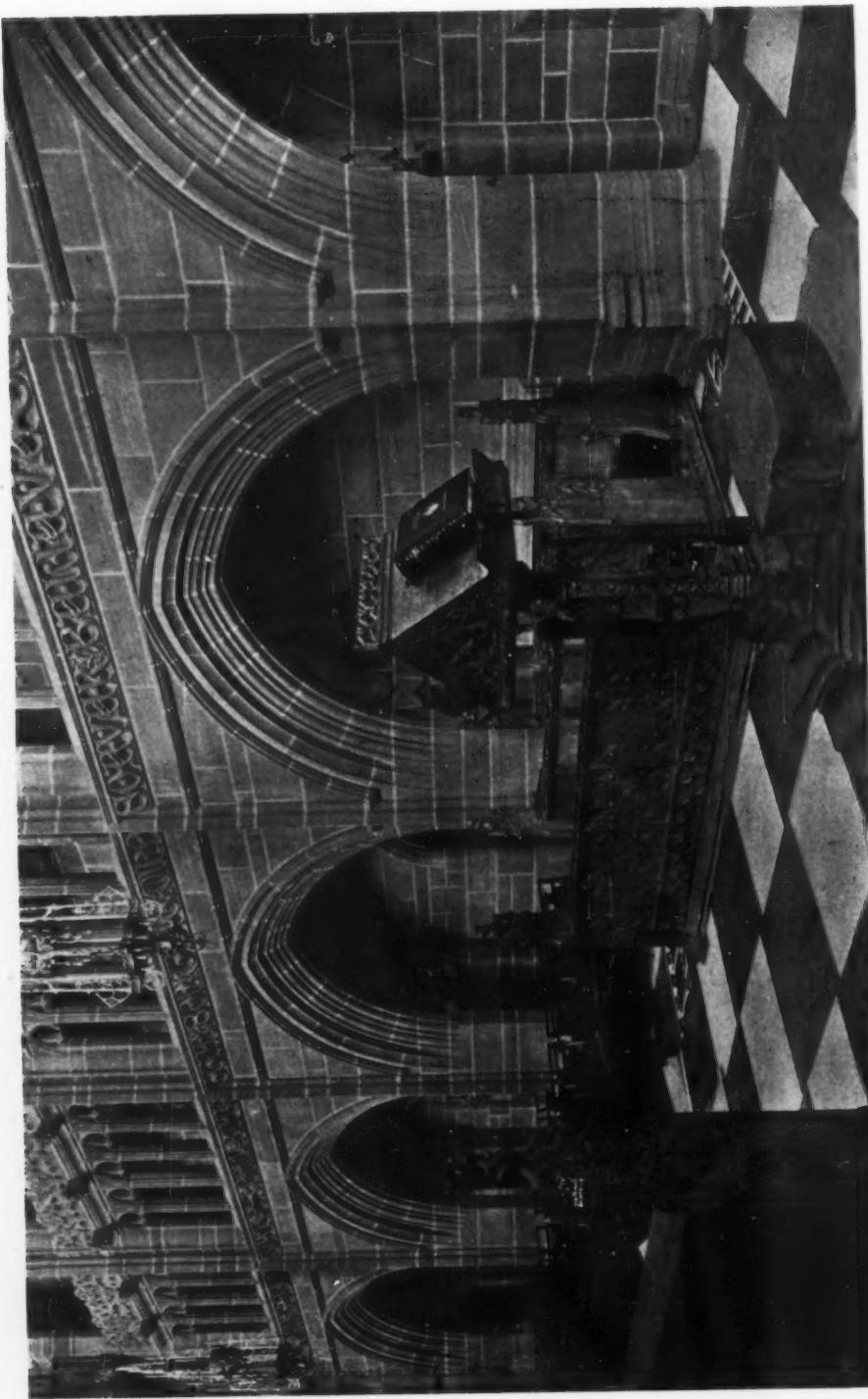
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INTERIOR OF THE LADY CHAPEL—LOOKING EAST—CATHEDRAL
CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.



By permission of Messrs. Morrison & Sons.

INTERIOR OF THE LADY CHAPEL LOOKING WEST—CATHEDRAL
CHURCH OF LIVERPOOL. G. GILBERT SCOTT, ARCHITECT.



LADY CHAPEL—NORTHERN ARCADE LOOKING WEST—CATHEDRAL,
CHURCH OF LIVERPOOL.

By permission of Messrs. Morrison & Son.

G. GILBERT SCOTT, ARCHITECT.

chinery used and they only for severing the large pieces of stone into the desired sizes.

The stone facing is nowhere less than one foot, and all walls of three feet and under are built solidly of cut stone. The brick bond used is old English, the bricks

being laid with an equal perfection, whether viewed or no. As the work proceeds, the walls, brick and stone alike, are thoroughly and constantly wetted, so that the mortar may not dry too quickly. The interior stone work as completed is "slurried," that



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DOOR TO LOWER VESTRIES FROM CHAPEL—CATHEDRAL CHURCH
OF LIVERPOOL.

G. GILBERT SCOTT, ARCHITECT.

is, covered with a mixture of lime and sand to protect it from the smoke and weather.

The average number of men employed is about two hundred. It is thought that at the present rate of progress, provided the money is forthcoming, another twenty years will see the Cathedral completed. It is being built by public subscription and gifts, the money in hand being about sufficient to maintain the work for another two years.

There is no contract, the builders being paid on a fixed schedule of prices as the work proceeds. Messrs. Morrison & Son of Wavertree are the contractors.

The writer wishes to express his thanks to Mr. Green, the Clerk of works, to whose patience and trouble he is largely indebted for the information contained in this article.

Mr. Scott is to be congratulated on his craftsmen and the skill with which he has chosen them. All the work is full of individuality and charm (without freakishness), workmanlikeness and labor

lovingly performed. As to the style, it is difficult to speak—Gothic in the large sense of the word—but not to be confounded with any particular one of the tabulated styles. It shows familiarity with and study of ancient forms, but it is no diatessaron of undigested parts collected at haphazard fancy and flung together in the mode of the Gothic Revival and spoken of as of this or that particular period or century.

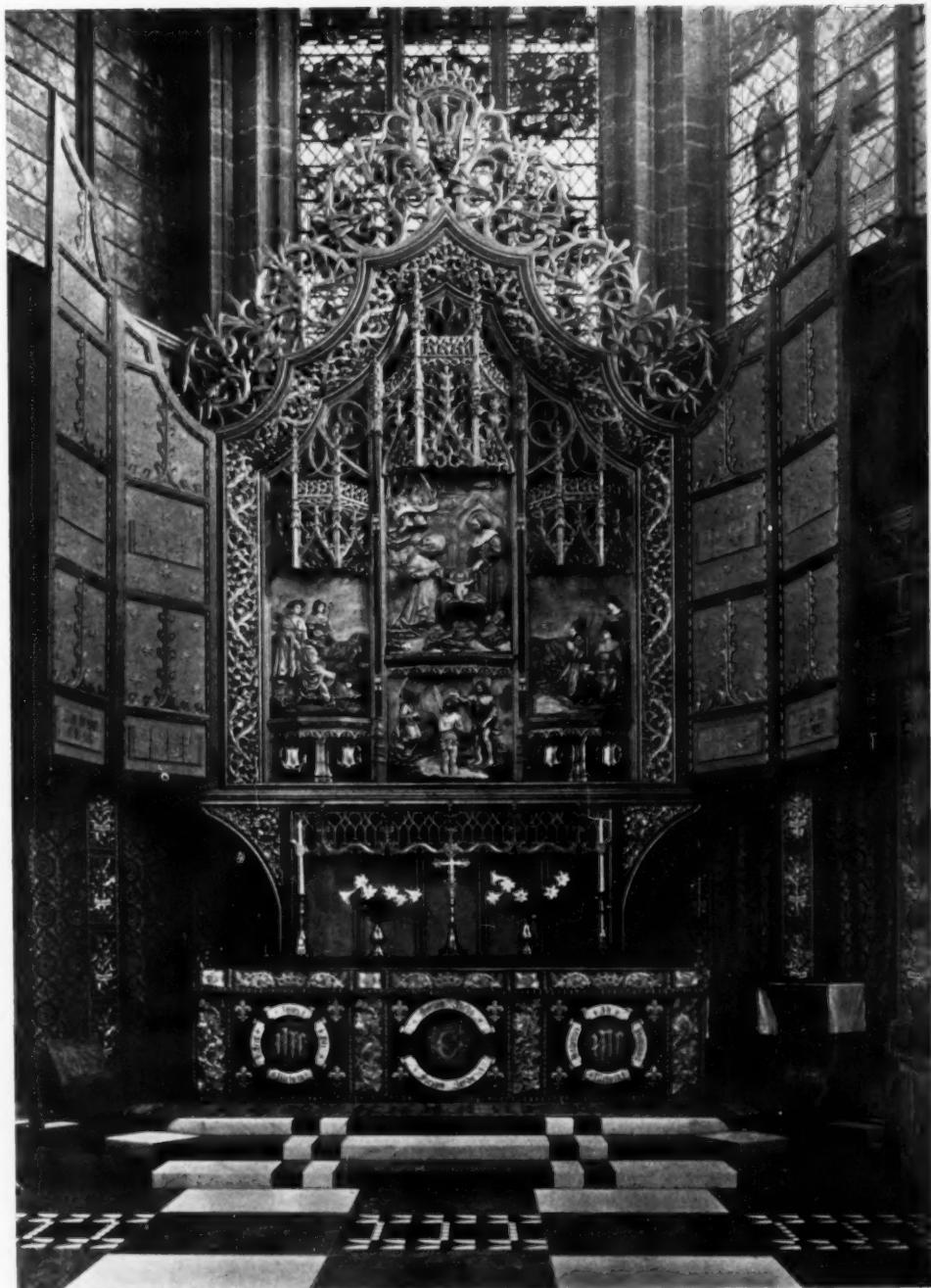
It is modern of the twentieth century, of to-day, thoroughly digested, and has been tied by no style—an example of living modern architecture as applied to a religious problem—religion, from whom the art of architecture had its being, for whom it was invented and developed. Modern method facing and solving an ancient problem.

Liverpool and Westminster Cathedrals are both well worthy to go down to posterity as examples of twentieth century ecclesiastical art and will stand forever, unashamed when viewed in conjunction with similar monuments of past ages of any country.

THE CATHEDRAL CHURCH OF LIVERPOOL

GENERAL DIMENSIONS.

Length of Choir inside.....	150'
Width of Choir inside.....	47"
Width of Choir aisles	13' 6"
Width of choir and aisles.....	86' 9"
Width of Choir and aisles (extending from face to face of buttresses).....	144'
Width of transepts (extending from face to face of buttresses)	230'
Thickness of arcade walls	6' 4 $\frac{1}{2}$ "
Thickness of aisle walls	6' 1"
Length from east to west (internal).....	480'
Length from east to west (external)	600'
Central preaching space	200' x 80'
Height from nave floor to cap of arcade.....	55' 7 $\frac{1}{2}$ "
Height from nave floor to cap of transverse arch.....	84"
Height from nave floor to apex of Choir vault.....	115'
Height from nave floor to apex of triforium vault	119'
Height from nave floor to apex of aisle vault.....	80'
Height from nave floor to cell of east window.....	46"
Width, jamb to jamb, of east window.....	36"
Height of glass in east window	76"
To cell of aisle window.....	41'
Jamb to jamb	15' 3 $\frac{1}{2}$ "
Height of glass	37'



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ALTAR AND TRYPTYCH IN LADY CHAPEL—CATHEDRAL CHURCH
OF LIVERPOOL.
G. GILBERT SCOTT, ARCHITECT.

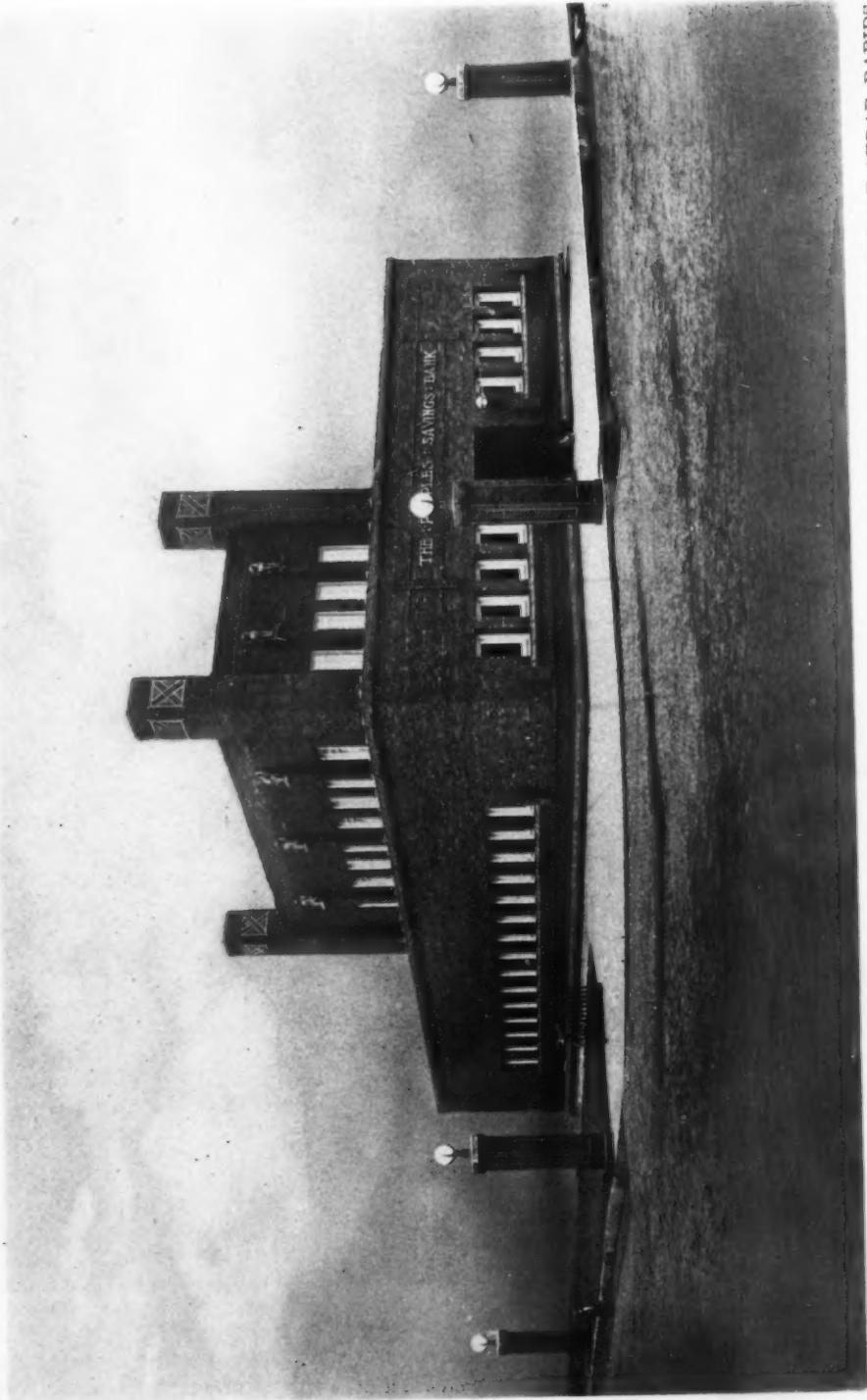


Photo by The Raney Studio

THE PEOPLE'S SAVINGS BANK OF CEDAR RAPIDS,
IOWA. LOUIS H. SULLIVAN, ARCHITECT.



THE PEOPLE'S SAVINGS BANK OF CEDAR RAPIDS, IOWA ~

LOVIS H. SULLIVAN, ARCHITECT

BY MONTGOMERY SCHVYLER

THERE IS NO DENYING that a new work by Louis Sullivan is the most interesting event which can happen in the American architectural world to-day. There has been nothing like the professional interest which his works inspire since Richardson ceased to produce, a quarter of a century ago. The succession of Richardson's works was indeed followed with more of professional attention, and for an obvious reason. The architectural profession, meaning a large majority of the active and ambitious practitioners of architecture, attended to the series of works which Richardson produced during the decade to which his professional activity and conspicuousness were confined, for the purpose of imitating, or at least of applying them in their own practice, in so far as they were imitable or applicable, and often further. The interest was thus selfish and practical, as well as disinterested and artistic. But Mr. Sullivan has few imitators. His "school" consists of a few disciples only, of one only whose discipleship has produced very noticeable or memorable works. In the October number of *THE ARCHITECTURAL RECORD* there were illustrated in conjunction a country house by the master and another by the pupil. The *Western Architect* of Minneapolis was moved by the conjunction to remark that while Mr. Sullivan's genius "permits him to do the most daring things in design and 'get away with it,'" of his followers "none have gone so far into the realm of the picturesque, or failed so signally in the production of livable houses, as Frank Lloyd Wright." We by no means quote these remarks as concurring with them, and at least as little as marking them for animadversion, but

merely to show the impression the contrast makes upon an apparently intelligent and candid mind. There is, to recur to our own comparison, this marked difference between the interest inspired by the works of Richardson and those of Mr. Sullivan that in the latter case there are no "by-ends." Richardson might have said of his architecture, even while he was still practising it, as Tennyson said of his poetry, even while he was still writing it—

Most can grow the flowers now,
For all have got the seed.

In fact, many things were done during the prevalence of the Richardsonian Romanesque that the master need not have been ashamed to sign, and many which require external evidence to show that he did not do them. Not one such example can be cited of Mr. Sullivan's work. The architect who studies it with a view to getting from it any hints that may be available in his own practice will have to abandon it with the melancholy admission that there is nothing in it to steal. He has not, of course, nobody has, the pretension to rival its author as a master of decorative design. If an equal genius in that kind should haply arise, he would do something very different. But what is true of the decorative design is as true of the architectonic "layout." Every one of his buildings is the solution of a particular problem, and the result is a highly specialized organism, which is as suitable for its own purpose as it is inapplicable to any other. It is as inimitable in the mass as in the detail. Hence is the interest which architects nevertheless continue to take in it disinterested, so to speak, their admiration free from any notion of direct ap-



DETAIL OF CHIMNEY TOP—THE
PEOPLE'S SAVINGS BANK.
Louis H. Sullivan, Architect.

propriation. To go and do likewise would, in this case, mean to go and do something entirely different, as different as the conditions and purposes of the second building would, upon patient analysis, reveal themselves to be from those of the first. Nay, the author of the first shows an impossibility or an impatience of repeating his own design where the commonplace architect would think that a very slight rehandling of a design already approved in one case would serve perfectly for the other. For example, Mr. Sullivan built a bank three years ago in a Minnesota village, The National Farmers' Bank of Owatonna, Minn., which was fully illustrated in *THE ARCHITECTURAL RECORD* for October, 1908, and was presently acclaimed by architects the country over as a signal success, the acclamation being produced, naturally, by an inspection of the photographs. Owatonna suddenly found itself famous, and became the Mecca of architectural pilgrimages. At the last report, twenty-five strangers a day

were visiting Owatonna expressly to inspect it. An architect who had won such a success with his first bank, and thereby been invited to do another bank, might in such a case, if in any case at all, have held himself justified in "standing on his attainment" and merely executing variations on his original theme. But what has the People's Savings Bank of Cedar Rapids, just now completed, in common with The Farmers' Bank of Owatonna, completed three years ago, excepting that it is a highly individual building? It owes nothing in plan, nothing in composition, nothing in detail, to its predecessor. It is, so to speak, grown from its own seed, and recalls the remark of another American architect that if one has faithfully studied and interpreted the requirements of his structure, expressional as well as practical, and faithfully followed them out, then he does not so much "design" his building as he "watches it grow."

The People's Savings Bank, then, consists, essentially, of a central space or main banking room, roughly 25 by 50,



DETAIL—STOP OF SILL COURSE—THE
PEOPLE'S SAVINGS BANK.
Louis H. Sullivan, Architect.



Photo by The Raney Studio.

DETAIL OF STREET LAMP AND SILL COURSE—THE PEOPLE'S SAVINGS
BANK, CEDAR RAPIDS, IOWA. LOUIS H. SULLIVAN, ARCHITECT.

which is described, rather awkwardly, as a "public lobby," whereas, according to Johnson, a lobby is "an opening before a room," while this is the central and nucleal apartment. It is surrounded by subordinate rooms, of a single story, which expand the total dimensions of the ground plan to 50 by 90, or thereabouts. These comprise the vestibule to the main room, the quarters of officers and clerks on each side of it, the vault at the back of it. But all these are the appendages of the business done in the main central room, which they would darken if they were of the same height with it and if it received its light only from the outer walls. The clerestory, then, is a practical necessity for the illumination of this room, while at the same time the most natural means of signalizing it and giving it the architectural predominance its importance deserves. The blank space accruing under the windows of the clerestory, what, in church architecture, would be the triforium, offers a most tempting expanse for mural decorations where they can be best seen on the one hand and best lighted on the other.

The building is thus clearly designed from within outward. The exterior is the envelope of the interior reduced to its very simplest expression. The simplicity and austerity of it will surprise those who look for fantastic decoration in Mr. Sullivan's work, and who wonder how he could have denied himself all the opportunities of doing what he can do so much better than any other living architect. Even in the bank at Owatonna, of which the masses are stark and severe enough, there are cornices, there are cordons which give lines of light and trenches of shadow, while the spandrels of the great arches are bordered with delicate detail in terra cotta, and at the corners of them the artist has allowed his fancy, elsewhere severely curbed, to effloresce in ordered masses of elaborated ornament. But of these things hardly a trace is in the newer building. The protrusion of the square mass at the centre, with the chimney at each of the four corners, which, as we

have seen, is the direct outgrowth of the utilitarian plan, gave this central feature so much resemblance to the central "keep" of a mediaeval castle that the temptation would to most designers have been irresistible of heightening this resemblance by some detail of military Gothic. But this is not a feudal castle of the twelfth century but an American bank of the twentieth, and to this designer the temptation to a romantic falsification may not have presented itself at all. So far, of course, so good; if he had been one of the rehashers of the old forms, he would by no means have justified the interest which he has excited. But the structure does not always abound even in its own sense. It seems to present at some points an arrested development, an incomplete expression. It is an old remark about Mr. Sullivan's work, in response to those critics who would like to dismiss him as a "decorator," that his sense of the disposition and relation of masses is as unfailing as his sense of grace and beauty in ornament, but that, between the general arrangement of the masses and the decorative development of the detail, there is the functional modelling of the masses, and that this intermediate point of design is liable to be slurred in his work. That remark might be cited with respect of this exterior. The projection of a course in stonework, or the successive projection of several courses in brickwork to serve the practical purpose of sheltering the wall from the weather and the artistic purpose of crowning it with a "finis," although so universally practised in all historical architecture, may be argued to be not a logical necessity, though to most beholders it will seem to be at least a rhetorical necessity. But at any rate a brick wall cannot cope itself but requires a crowning coping, and the satisfaction of this requirement offers a legitimate subject for architectural expression. It was supplied with signal success in the bank of Owatonna. To have supplied it here would have relieved the starkness of the outline of the walls both of the substructure and of the clerestory, without at all compromising, as it seems,



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LOOKING NORTH IN LOBBY TO ENTRANCE VESTIBULE—THE PEOPLE'S
SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "FALL
EVENING."
LOUIS H. SULLIVAN, ARCHITECT.

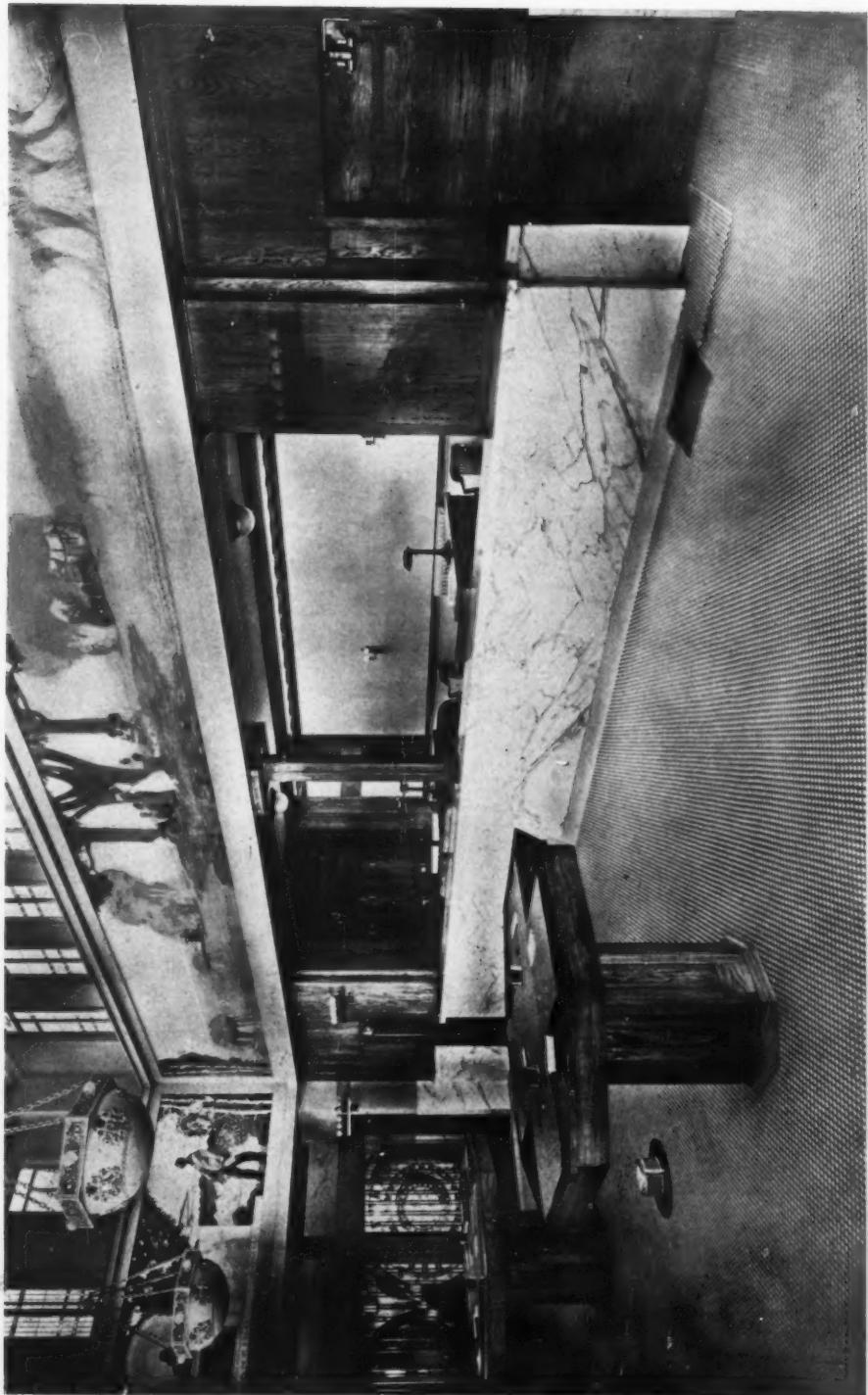


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LOOKING WEST INTO OFFICE QUARTERS—THE PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "SUMMER NOON,"
LOUIS H. SULLIVAN, ARCHITECT.

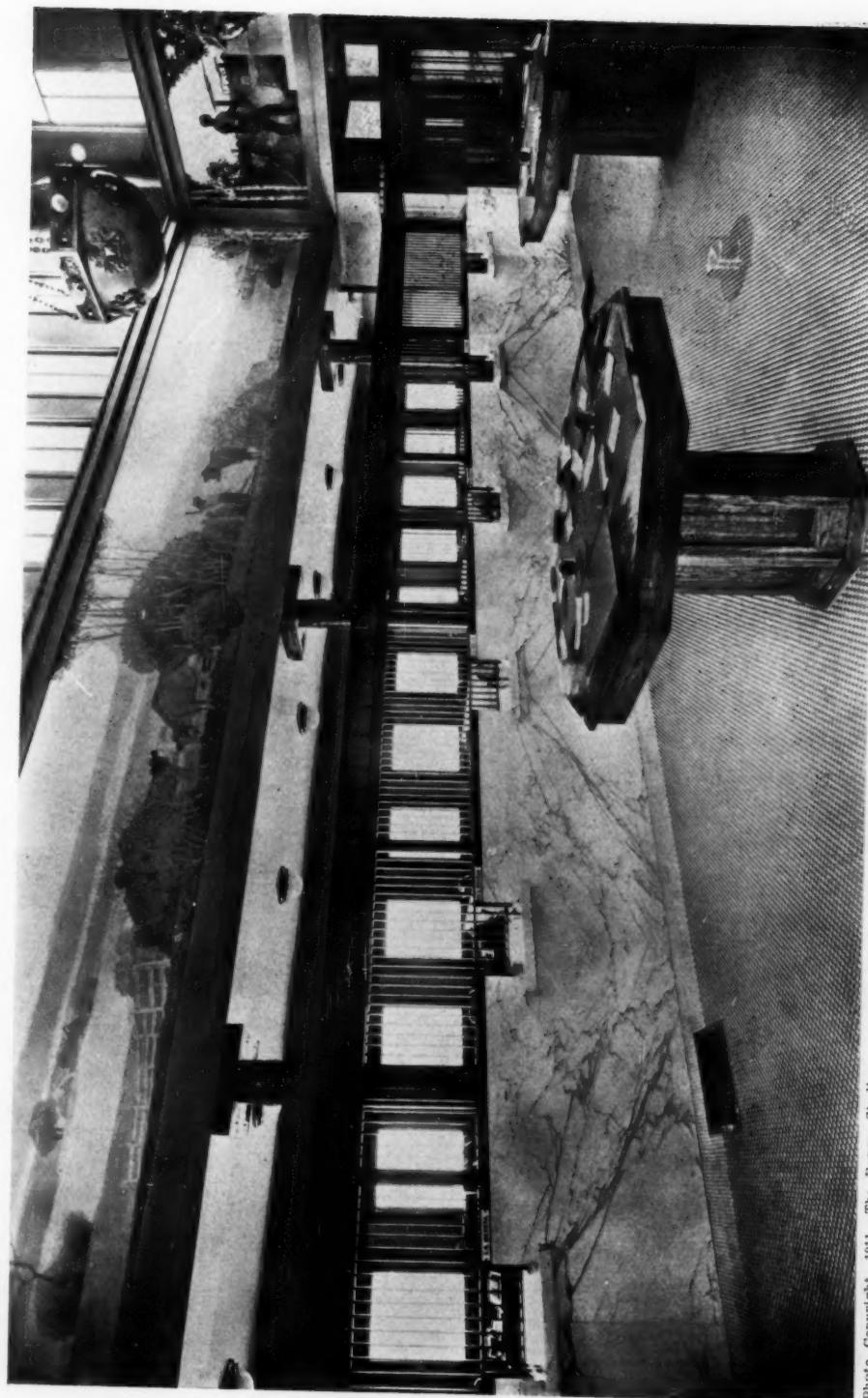


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LOOKING EAST—TELLER'S QUARTERS AND WORKING FORCE—THE
PEOPLE'S SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING,
"SPRING MORNING." LOUIS H. SULLIVAN, ARCHITECT.

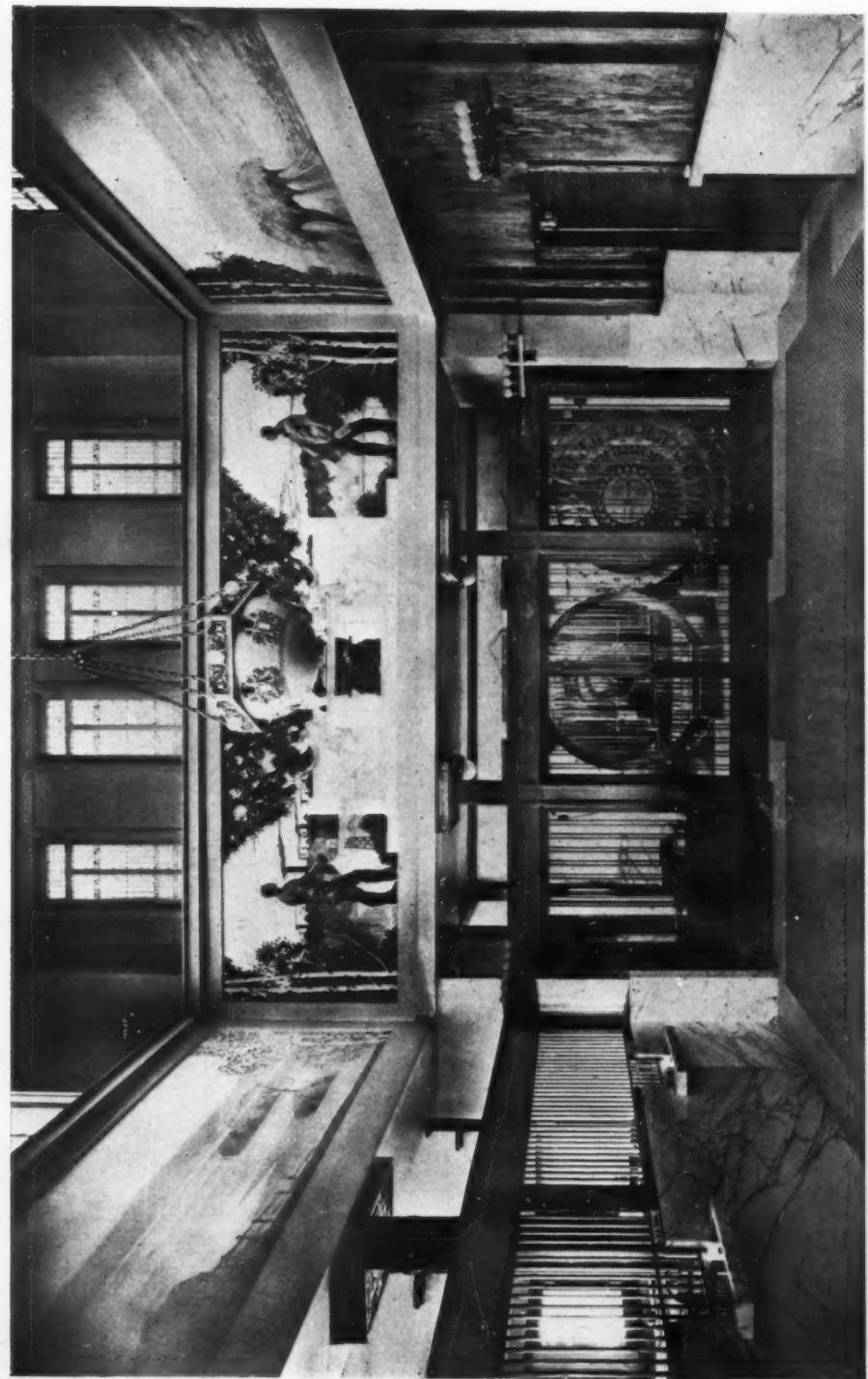
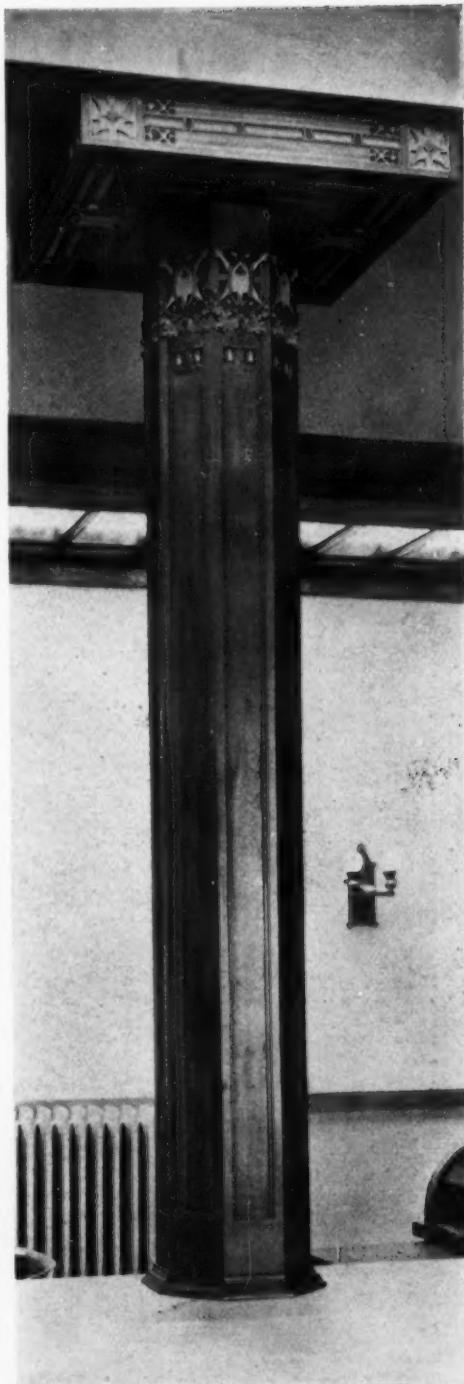


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LOOKING SOUTH ACROSS LOBBY TO GRILLES TO VAULT—THE PEOPLE'S
SAVINGS BANK, CEDAR RAPIDS, IOWA—MURAL PAINTING, "INDUSTRY—
BANKING—COMMERCE."
LOUIS H. SULLIVAN, ARCHITECT.

and even while promoting the rationality of the treatment. As it is, the only relief supplied to the absolute plainness of brick wall is in the grotesques which serve as finials to what are apparently prolongations into the clerestory of what, in ecclesiastical architecture, would be the "nave piers," the principal points of support of the clerestory walls, and in the panels of ornament which fill the emergence of the chimneys above the clerestory walls.

The views of the interior furnish material for a real appreciation. And, indeed, it seems clear that, in the mind of the architect, the interior is "the thing" and the exterior reduced to becoming its simplest expression. The modern American conception of a bank is very different from the old-fashioned conception, derived from Europe, in one respect which is particularly important to its architecture. The old-fashioned bank was a temple of Plutus, hedged and guarded with as much mystery as if it had been a temple of Isis. You could put your money in or even, ordinarily, get it out, in the light of day, being divided from the officiating teller only by a grille which was supposed to protect from your ravages the treasures of which he was the guardian. But the high priest of the temple was in some remote and hidden apartment, to which you could penetrate only by a series of diplomatic pourparlers. Now the game of finance is played openly, "cards on the table," and there is no mystery hedging the president or the cashier any more than the least considered of their subordinates. Every modern bank recognizes this difference more or less in its design, but few modern banks so completely as this in Cedar Rapids. There is, indeed, a "Consultation Room for Officers," and this apartment has a door which on special occasions can be shut. There are similar rooms in which the customers of the bank can transact their private business. But with these exceptions whoever enters the bank can see through it from end to end and from side to side. Even the vault is thrown open to sight during business hours and becomes an impres-



DETAIL OF COLUMN IN BANKING
ROOM—THE PEOPLE'S SAV-
INGS BANK.
Louis H. Sullivan, Architect.

sive element in the architectural ensemble, with its circular door, seven feet in diameter, twenty-two inches in thickness, and twenty-five tons in weight. Every wicket and every desk even bears on the tablet the name of the official on duty at the moment. "Fiat lux" is evidently the motto of the whole establishment, as of its architecture. This, one feels, is the habitation of a highly organized and highly specialized machine,

partitions have evidently been carefully sought with reference to their decorative effect, and sought successfully. Material of this kind shows to the best advantage when employed in unbroken surfaces as extensive as may be. One willingly foregoes, in such expanses, the moulded framing of the marble, the panelling of the woodwork. But elsewhere and throughout it is evident that a square arris has no terrors whatever for this



Photo by The Raney Studio.

OFFICERS' QUARTERS—THE PEOPLE'S SAVINGS BANK.
Cedar Rapids, Iowa.

Louis H. Sullivan, Architect.

in which not only provision is made for every function, but expression given to every provision.

The absence of what we have called functional modelling is as marked, almost, in the interior as on the exterior. If it be not so noticeable, that proceeds from a circumstance which here explains and tends to justify the omission. The material itself of this interior is of great beauty and great sumptuousness. The marble of the counters, the oak of the

designer and that he willingly omits what to the designer of another school, to the designer, we may say, of any "school," would be the irreducible minimum of "finish." This is seen in the detail throughout, in the joinery of the counters, in the framing of the mural pictures, in the "trim" of the subordinate rooms. And the willingness to forego traditional transitions and modifications is as evident in the columns, which are hardly columns, of which the capi-

tal that mediates and forms a graduated transition between the shaft and the abacus is an essential member, but rather posts, upon which the spread of the abacus is directly superposed, or rather interposed, for the posts which carry the clerestory walls are "produced" into the strips of pier which we have seen terminating in the grotesques of the exterior. Even so, it must be admitted that some form of capital, either

velopes of the structural steel posts, the detail of the faces and of the soffits of the abaci, the incrusted ornament of the electroliers, have that personal and incommunicable quality which makes their author's decorative detail so fantastic and delightful.

Evidently Mr. Philbrick's mural paintings are an integral element of the architectural design. Excepting the figures at the end of the main room opposite the

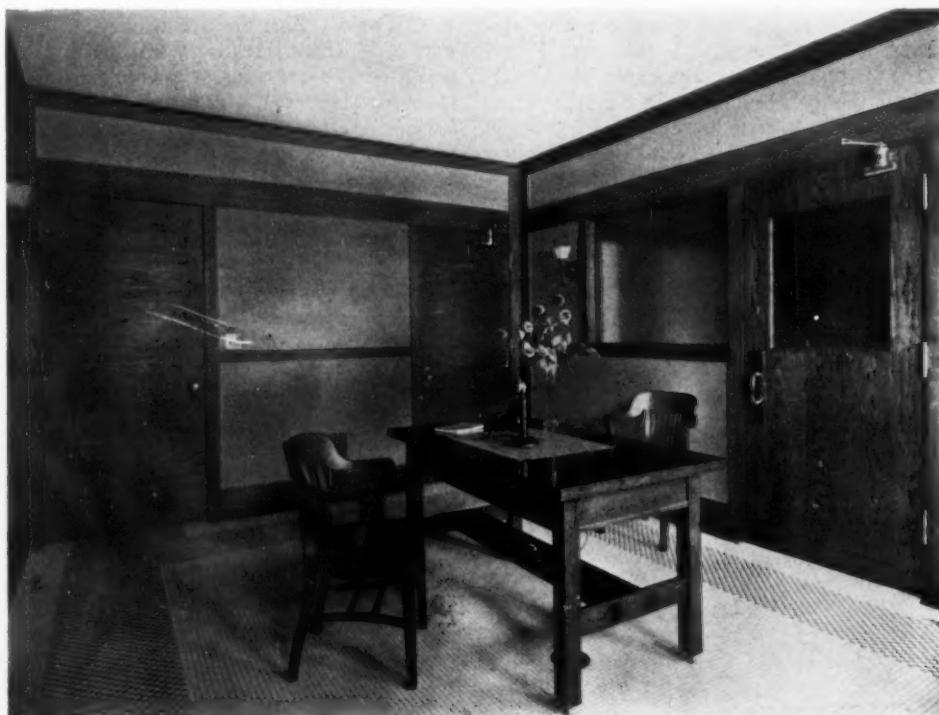


Photo by The Raney Studio.

PART OF MEN'S ROOM—THE PEOPLE'S SAVINGS BANK.
Cedar Rapids, Iowa.

Louis H. Sullivan, Architect.

the swell of a bell in stonework or spreading braces in wood or metal, supporting and relieving the abacus, is demanded not only by tradition but by the nature of the construction, and that the omission of it is a lapse in structural logic.

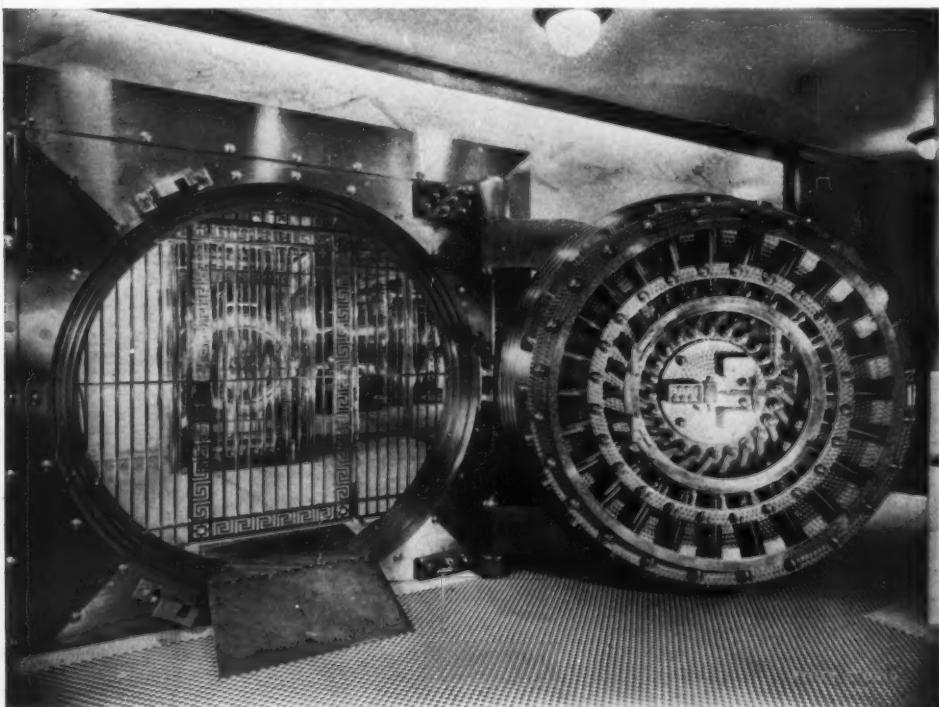
On the other hand, such strictly technical and architectural decoration as is sparingly introduced suffices to make one wish that it had been introduced more freely. The necking of the wooden en-

trance and above the entrance to the vault, in which Industry and Banking and Commerce are symbolized, and symbolized effectively, these are representations renouncing allegory and aiming to depict the agriculture which so nearly engrosses the activity of Iowa. The photographs enable one to judge of the pictures in their design and to see how effectively they complete the architecture in which they are set and what an admirable setting the architecture provides

for them, both practically in its perfect and abundant illumination and artistically in making them contribute to the force and effect of a single and total impression, to which each of the allied arts invoked bears an integral and organic relation.

Undoubtedly the building has a physiognomy and an individuality. Whatever else one may be moved to think about it, he must confess that in this respect it is a refreshment, at a time when individuality is so infrequent in any department of American building and rarest at all in our commercial building. When the graduates of the Beaux Arts came back to go to work as "single spies," when Hunt came back, when Richardson came back, when Mr. Sullivan came back, they were content to employ their foreign training to giving American solutions to American problems. Now that they are coming back

"in battalions" so many of them seem bent upon importing the solutions, and even the problems, that it sometimes appears as if in our commercial and public architecture we should be reduced, as Johnson complained that English writers of his generation were in danger of being reduced, "to babble a dialect of France." To those of our Beaux Artists who look across the water both for their inspiration and for their appreciation, it must have been rather a blow that, at the World's Fair in Chicago, Mr. Sullivan's Transportation Building, which some of the classicists his colleagues, so strongly deprecated and resented, should have been the only erection which was worth to its designer the medal of a French artistic association. It is no wonder that this bank in Cedar Rapids, like its predecessor in Owatonna, should already be drawing its "twenty-five strangers a day" expressly to visit it.



SAFETY DEPOSIT VAULT AND DOOR (Weight, 50,000 pounds; 22 inches Thick)—
THE PEOPLE'S SAVINGS BANK.

Cedar Rapids, Iowa.

Louis H. Sullivan, Architect.



EARLY AMERICAN CHVRCHES

PART II

ST. PETER'S, PHILADELPHIA, PA.—FARMINGTON, CONN.—CHRIST CHVRCH, HARTFORD, CONN.—OLD SWEDE'S CHVRCH, WILMINGTON, DELAWARE.

BY AYMAR EMBRY II



ST. PETER'S CHURCH was begun as a chapel to Christ Church in 1758. It was built on land given by two sons of William Penn, and it may be interesting to note that two sons of such a prominent Quaker as Penn, were Episcopalians. The building of the church was due to the fact that Christ Church began to be overcrowded, and in 1758 the vestry record that "it is unanimously agreed that the taking and collecting the subscriptions and conducting the affairs relating to the building and furnishing the said intended church shall be under the management of the minister, church wardens and vestry of Christ Church." I have been unable to find the name of the architect with any certainty, although it seems probable to me that Samuel Rhodes was the designer. It was built during the years 1758-61 and was maintained as a chapel to Christ Church until 1832, when its separation from the parent body was effected. The building is of considerable size (sixty by ninety feet) and both in the exterior and interior possesses marked architectural interest, although one regrets to learn that the very excellent tower and spire were

added in 1842, from the designs of William Strickland, a well known architect of that day. It is, however, very sympathetically conceived and was in a sense an extension of the original design as the lower part was originally a cupola with two small bells. The extension to the tower was made partly from a matter of sentiment and partly because a full chime was then presented to the church. The interior is of especial interest because of its peculiar and unusual plan, in which the pulpit is placed at one end of the building backing against the tower, while the reredos is at the other directly across the triple window shown in the photograph of the exterior. There is no principal entrance to the church, but two small doors at each corner lead to a vestibule through which the body of the church is reached. The ceiling is a flat barrel vault with two secondary arches piercing it each side of the pulpit and a single arch over the reredos. The interior, including the stone flag floor, remains practically in its original condition, and the old pews are undisturbed.

MEETING HOUSE FARMINGTON, CONN.

THE OLD MEETING HOUSE at Farmington is generally considered one of the best in New England. It was constructed in 1771, being the third house of worship erected in Farmington, and its location was then changed from the centre of the street, where the other two structures had been, to the side, according to a custom which was only at that time beginning to form in New England.

Most of the older churches in New England have been square hipped roof structures with somewhat of an auditorium plan, and the plan was in this building continued, although the gable roof and tower lent an appearance of length in conformity to the modern idea. The principal entrance remained, however, at the centre of the long side with a small entrance into the tower from which a



INTERIOR OF ST. PETER'S CHURCH (P. E.),
PHILADELPHIA,
PENNSYLVANIA.



ST. PETER'S CHURCH (P. E.),
PHILADELPHIA, PENNSYLVANIA.

staircase led to the galleries. The building was designed by Captain Judah Woodruff and was, so far as I can learn, his only effort at church design, although he was the designer (and the builder as well) of a number of excellent residences in Farmington and its vicinity.

Perhaps the most interesting feature of the church is the belfry supported on eight slender columns; the lightness of the construction of this tower is of appearance only, since what appear to be columns are in reality the tops of long posts which run down through the main body of the tower for about twenty-five feet and are cross-braced and tied together, making a construction so firm that it has stood without radical repairs since it was erected. An interesting detail of the construction of this tower, which indicates that its designer thought it necessary to use the utmost care in the

construction, is that the heads of the hand-wrought bolts which are used to tie it together, are marked to correspond with marks on the edges of the holes through which they were driven. The construction of the remainder of the church was of the same excellent character; even the ridge pole has a sag of only one and a half inches in the whole length of the church, while it is also stated that about half the shingles and practically all the clapboards are those originally used. The interior has unfortunately been somewhat remodelled; the curious turned wooden posts, which support the gallery, and the slip pews were put in place about 1860, and the organ with the decoration around it was of the same date, although the pulpit is the original one. The design was, I understand, copied from that of a similar church at Wethersfield.

CHRIST CHURCH

HARTFORD, CONN.

THE PRESENT BUILDING is the home of one of the oldest congregational churches in Connecticut. The original meeting house of this congregation was built in 1636 on what is now State House Square but was occupied only five years. The second church stood for over a hundred years and was designed by one Colton Palmer of Warwick, Rhode Island, who is, so far as I know, the first architect of this country whose name has been preserved. The old building became dilapidated, and the congregation was outgrowing it when in 1804 a committee was appointed to consider a new building. The old building was sold in December, 1805, and the new building was begun in 1806 and completed in 1807, the congregation in the meantime occupying a theatre from which Theatre Street gets its name, and in the history of the church it is stated that alcoholic

stimulant in considerable quantity assisted the speed of the erection.

Both the interior and exterior are in design among the most ornate of the early American churches; the drawings, or at least the sketches, were made by one of the members of the congregation, Daniel Wadsworth, the so-called "Mae- cenas" of Hartford. The tower is of considerable interest, the lower seventy feet being of brick and the remainder of wood, the only order used in the tower, as well as those of the portico and the interior, being Ionic. The interior is certainly one of unusual charm; and, although the columns used are of extraordinarily slender proportions, the attenuation does not seem to have produced any appearance of instability. The plan is a very simple one, consisting of a nave with aisles under the galleries, the nave vaulted with a coffered barrel vault.



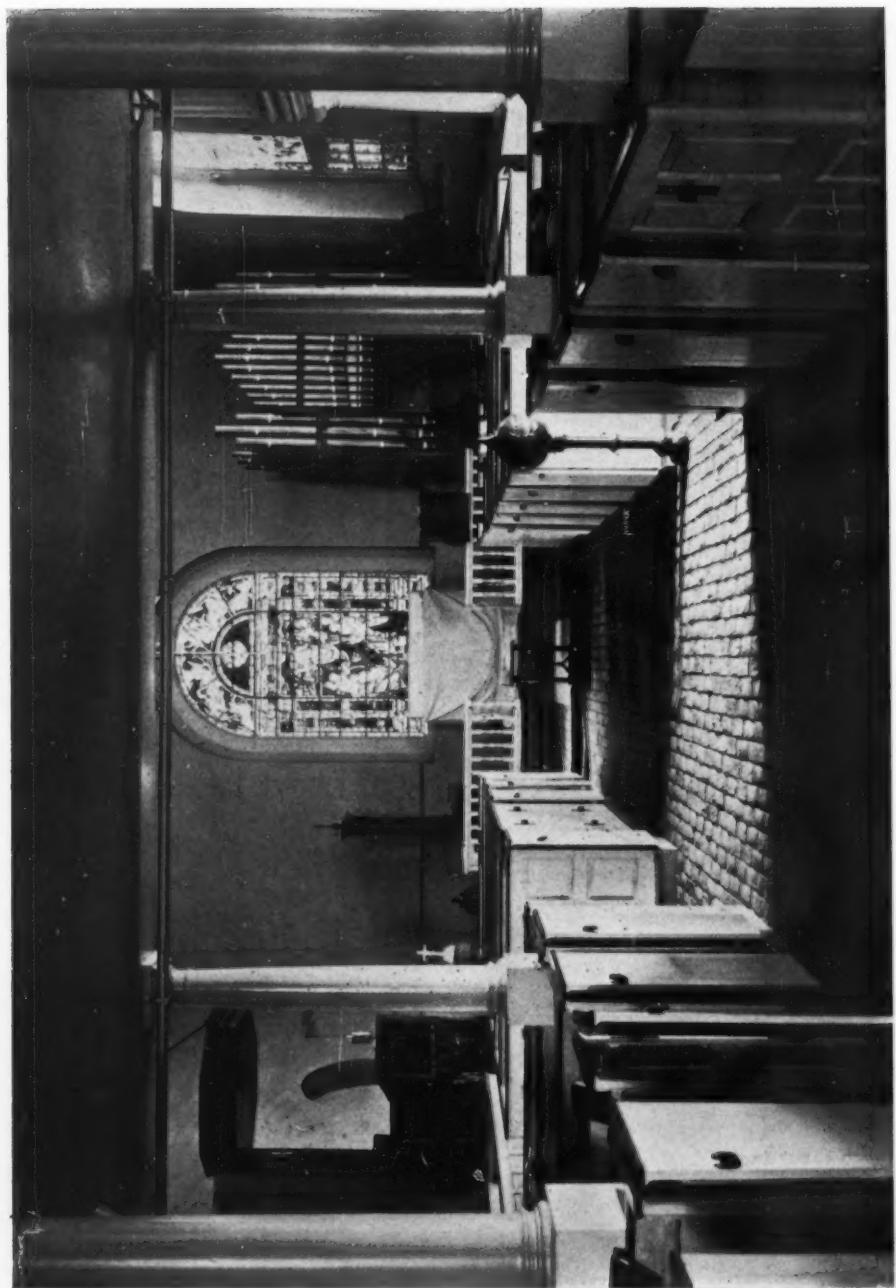
MEETING HOUSE,
FARMINGTON, CONNECTICUT.



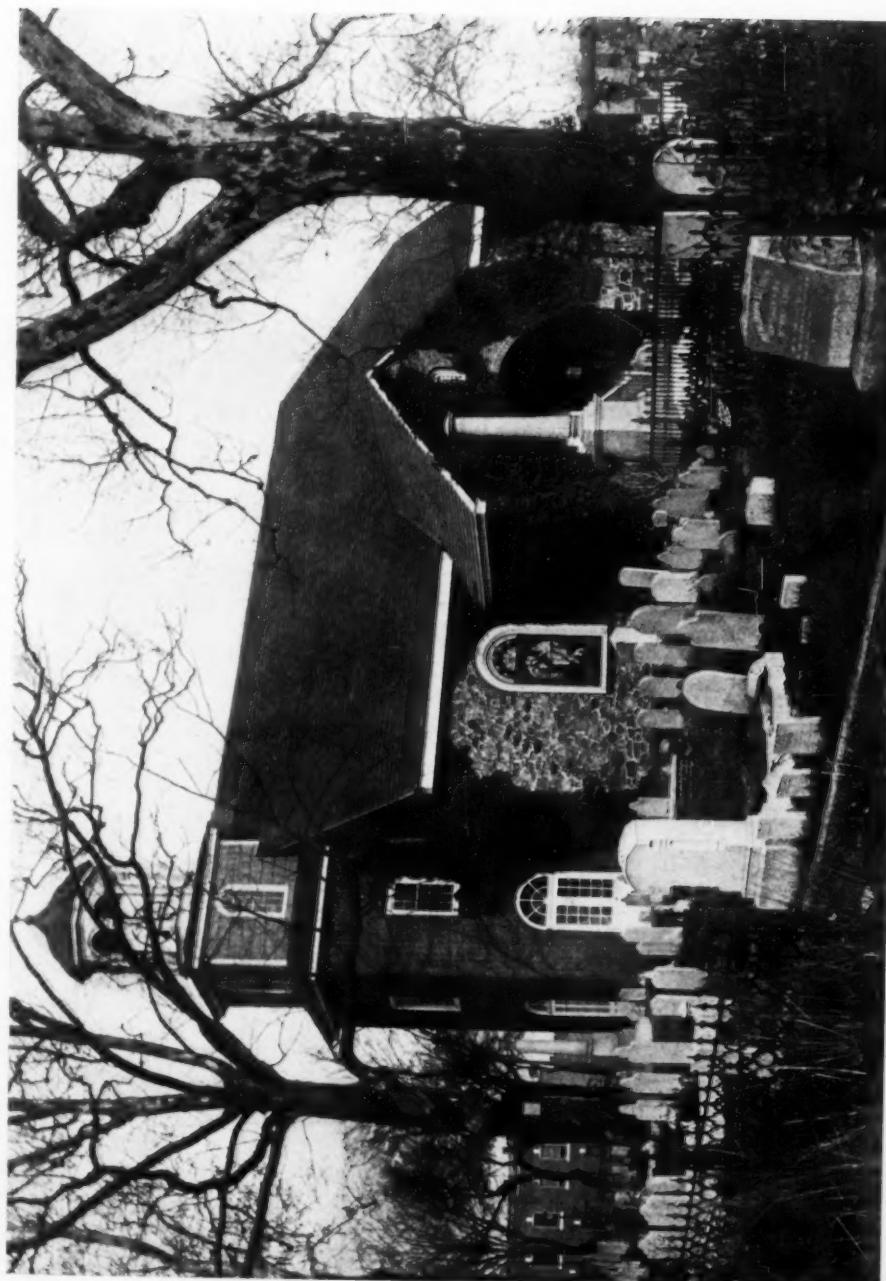
MEETING HOUSE,
FARMINGTON, CONNECTICUT.



INTERIOR OF FIRST CHURCH OF CHRIST,
HARTFORD, CONNECTICUT.



OLD SWEDES CHURCH,
WILMINGTON, DELAWARE.



OLD SWEDES CHURCH,
WILMINGTON, DELAWARE.

TRINITY CHURCH

WILMINGTON, DEL.

THIS CHURCH, better known as "Old Swedes," was built by Swedish settlers at Wilmington in the latter part of the seventeenth century and was dedicated on Trinity Sunday, 1699. The question as to whether the tower was or was not a part of the original design is not known; the difference in the materials suggests it was probably added later, although the inclusion of a certain amount of brickwork in the body of the church indicates the possibility that it was erected at the same time. The church is sixty feet long and thirty feet wide, the walls twenty feet high, built of granite laid in clay and pointed up with lime mortar. The constructors, in order to

insure durability, made the foundation wall six feet thick, while the superstructure at the windows was three feet thick. The plan is rather interesting, since the portion of the building to the right of the doorway is the full height of the building, while a small gallery extends across nearly half the church at the left and is reached by a staircase, partly exterior and partly interior, beginning in the entrance porch. While it is, perhaps, not architecturally a very extraordinary piece of design, it is one of the most interesting of all the older churches and is in fact one of the dozen oldest which have been preserved.

[EDITOR'S NOTE—There began in the December issue of THE ARCHITECTURAL RECORD the first group of "The Early American Churches." Four examples will be published each month until such time as the subject is completed.]





FIRST CHURCH OF CHRIST,
HARTFORD, CONNECTICUT.

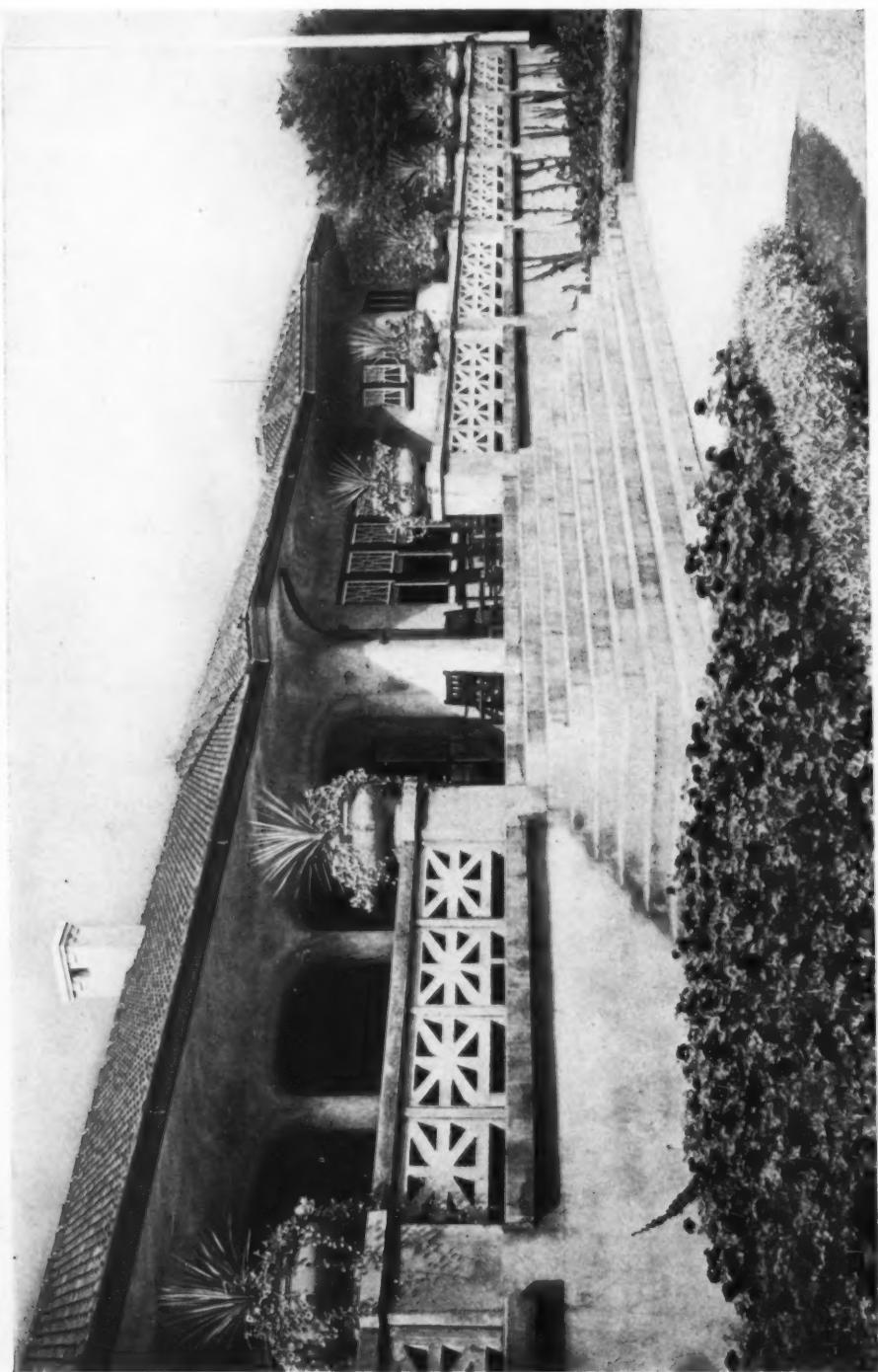


FIG. 1—SHOWING CONCRETE USED IN THE
CONSTRUCTION OF A PORCH BALUSTRADE.



ARCHITECTURAL TREATMENT OF CONCRETE STRUCTURES

PART IV

CONCRETE IN LANDSCAPE GARDENING

BY M. M. SLOAN



FROM THE ANCIENT DAYS of Greece and Rome the architect and artist has paid particular attention to the improvement of the surroundings of important buildings and structures, and the extent to which landscape gardening has been developed has kept pace with the wealth of the country.

In the Colonial days of this country the available wealth was limited, and only a few of the larger landholders attempted to beautify their lawns and gardens. What was done in this respect in the early history of the country was principally in the construction of walks, the care and attention to the trees, and the planting of old-fashioned flowers and hedges to enhance the approach to the Colonial mansion.

If any attempt was made to use other than the natural foliage, it principally consisted of terraces and rough stone walks which could be constructed readily by unskilled labor, though not infrequently some attention was paid to the approach to the driveways, thus copying the entrances to the old estates of England. Some of these places are still left intact in this country and have a beauty which is difficult to rival.

As time passed, the country went through a period of inartistic attempts with ineffectual materials to improve the appearance of lawns and the landscape approaches to houses and estates. So it was that forty years ago the first signs of approaching prosperity were indicated by cast-iron dogs in various positions, painted lead color, guarding the walks or approaches. The more pretentious attempts consisted of marble or terra cotta statues scattered promiscuously

throughout the groves and lawns, leaving much to be desired with regard to the general scheme and improvement of the landscape.

These decorations were quite frequently emulated in plaster paris, and a fair percentage of the Italian emigration was employed in the making and peddling of "Plaster of Paris," boys carrying baskets of fruit and other atrocious garden ornaments which were usually deposited in some prominent place in front of the residences.

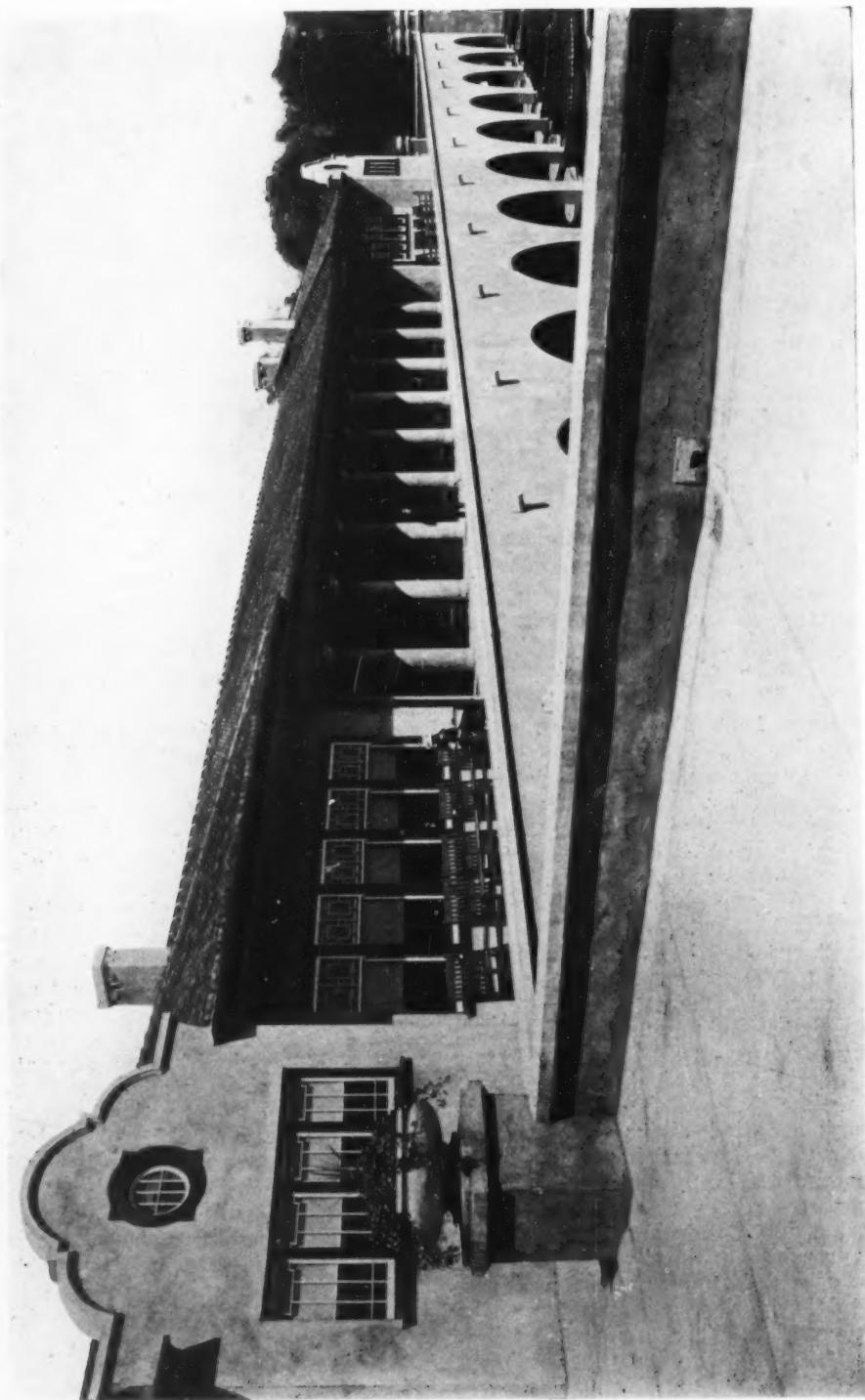
As the artistic taste of the people became more and more developed, much money was spent in the beautifying of the land surrounding the residences, until to-day the grounds are one of the features of the property and are planned with the greatest care to obtain, with the natural beauties, the highest artistic attainment.

The architect and landscape artist soon saw the beautiful effects of columnar walks, lattice work and terraces with proper approaches, sun dials and pedestals for the support of interesting antique vases, fountains and ponds, interestingly arranged with respect to natural topography and foliage.

As concrete construction came into more general use, it was soon realized that in it was a material especially suited for the beautifying of gardens and lawns and the extensive grounds of estates.

The concrete while rough in texture is of a color which, though objectionable in a finished building in the centre of a city, lends itself admirably to a background of green foliage and bright flowers and is particularly adaptable to certain classes of informal buildings, such

FIG. 2—SHOWING CONCRETE USED AS
A WALL WITH ARCHED OPENINGS.



as bungalows and club houses and in the construction of open porches and surrounding terrace walls.

In Figure 1 there is shown the use of concrete in the construction of a porch balustrade with urns for flowers and trailing vines. It will be noticed that the design is simple and yet strong and effective, and that the beauty of the vases is in their simplicity of form and good proportions.

In Fig. 2 there is shown the use of a concrete wall around a terrace of a boathouse. The arched openings in the concrete wall at the boat landing are particularly effective, and the entire ensemble has an element of beauty which would be difficult to obtain with other than monolithic concrete.

One of the principal uses of concrete as a decorative feature in landscape gardening is in the construction of pergolas, and for this purpose where there are a number of units of the same pattern, the work can be turned out at low cost and, properly designed, is very effective.

In Figs. 3, 4 and 5 are shown good



FIG. 3—PERGOLA ENTRANCE.

examples of concrete posts of architectural proportions supporting the open trellis work which usually forms the roofs of features of this kind.

A very simple pergola entrance effect



FIG. 4—DORIC COLUMNS OF MOULDED CONCRETE.

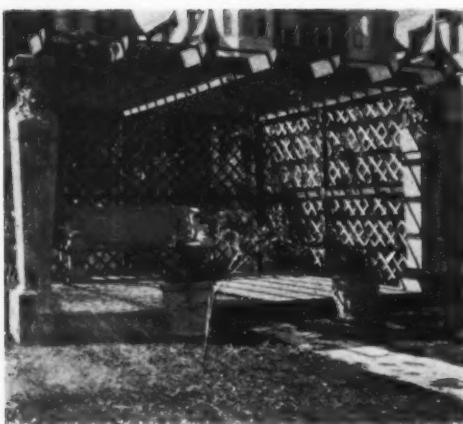


FIG. 6—CONCRETE PEDESTALS.

is shown in Fig. 3, where concrete is used for the simple posts, of massive proportions, of a garden entrance. The posts, as will be observed from the illustration, are given an entasis and are surrounded with timber work to form

a trellis. Concrete has also been used in forming the lily pond, which makes an effective feature in the foreground.

A somewhat more elaborate design is illustrated in Fig. 4, which shows Doric columns of moulded concrete with a crude but effective balustrade consisting of moulded balusters with a wide coping. The work is crude, but, backed by the foliage and offset by the natural features, makes a very dignified and artistic structure. This larger pergola was built on the "Good Luck Ranch" in California.

Not only are the classic proportions adhered to in the design of columns for pergolas, but quite frequently the columns supporting the open roof follow Gothic or Norman lines, though probably with little consistency for such architectural features.

A departure from classic proportions and design in columns of concrete for a pergola is shown in the beautiful

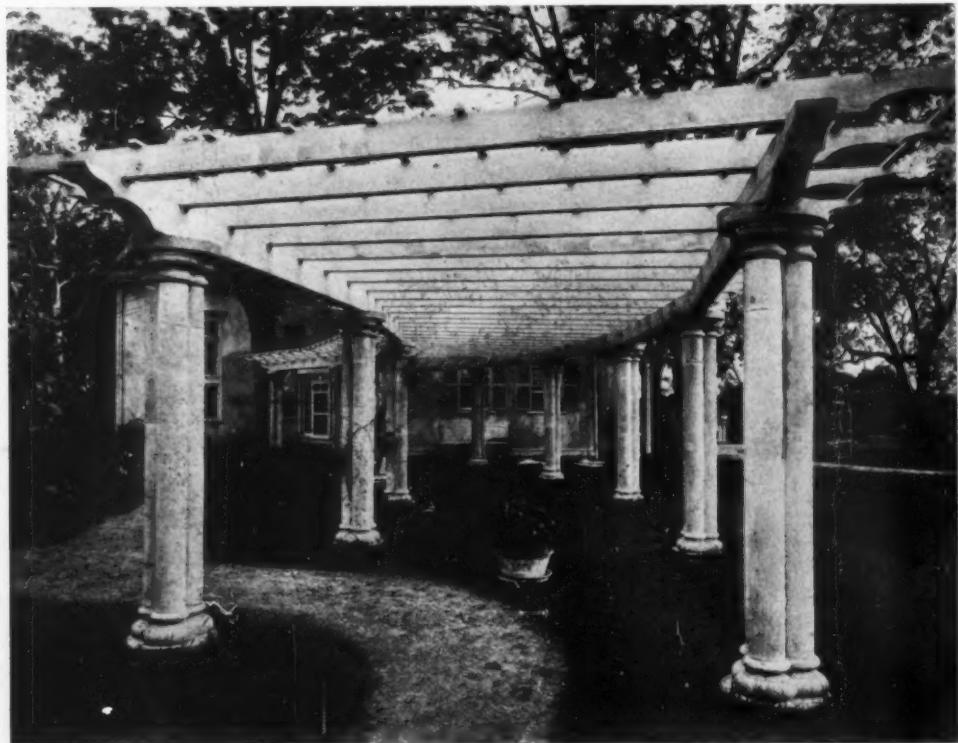


FIG. 5—GROUPED COLUMNS FOR THE PERGOLA.

effect obtained by the moulded concrete grouped columns illustrated in Fig. 5. The structure of which these columns are the principal feature is on the estate of C. Le Verne Butler, Framingham, Massachusetts. This pergola was designed by the owner and is very interesting and effective. No attempt is made to give a fine finish to the columns, but the texture of the concrete shows, which is rather an advantage in work of this character.

Not always is the designer's taste inclined towards columnar effects in the use of concrete for pergola construction, and a deviation from the usual column support is shown in Fig. 6, which illustrates concrete pedestals designed after the Pompeian style, with head terminations at the top, forming the main supports for an outdoor porch surrounded with lattice work, and effectively set off by the concrete flower pots and moulded concrete seat. This illustration shows beautifully the effect of sunlight and shadow obtained in a design of this kind.

Owing to the cheapness with which concrete can be used, as compared with architectural cut-stone work, in many sections of the country it has been ex-



FIG. 8—CONCRETE USED FOR ENTRANCE, ROUGH FINISH.

tensively used for the construction of walls and entrances for enclosing the grounds of country residences.

To show what dignity can be obtained by using concrete for these purposes, Fig. 7 is given, which illustrates a concrete gateway entrance of good proportion and design. A study of the photograph shows that the concrete is given a rough finish, excepting for a small border or arris on the edge. The design is particularly pleasing on account of its simplicity and proportions and, set off

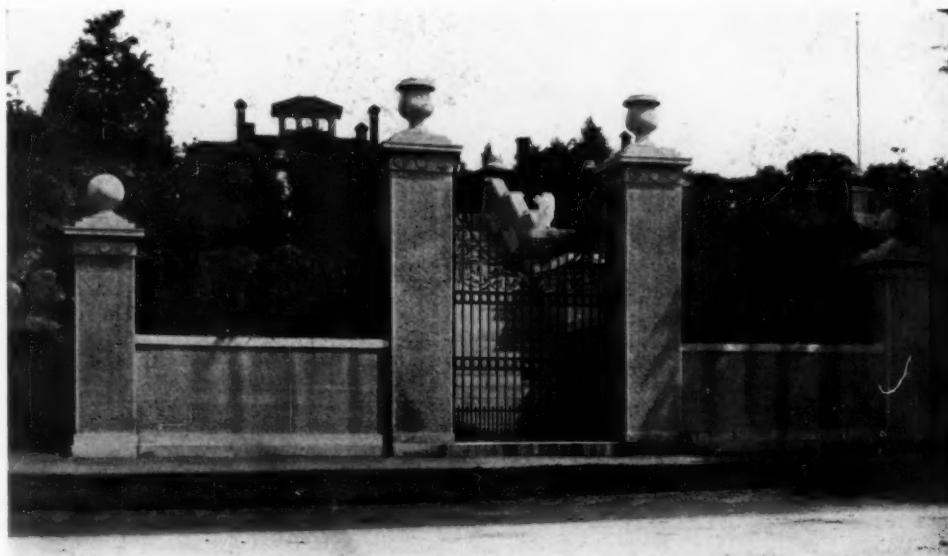


FIG. 7—CONCRETE GATEWAY ENTRANCE.

as it is by the wrought-iron gates and the long flight of cement steps, makes a beautiful approach.

To illustrate how effectively concrete can be used for entrances to grounds without attempting to give it a smooth finish and leaving it in its own rugged simplicity, the illustration, Fig. 8, is given. These gate posts are at the entrance to Henry Mercer's place at Doylestown, Pennsylvania.

An examination of the photograph shows that no particular care was taken

ished material. While the concrete gate posts are almost completely covered with a foliage, yet the photograph shows the possibilities of finishing the top of such posts and also demonstrates that the material can be used as effectively as cut-stone work for this purpose and with less cost. Concrete for such purposes also has this advantage, that when used in positions where it is to be partially covered with clinging vines it weathers rapidly, and the appearance of newness is dissipated in a few months' time. This,



FIG. 9—ENTRANCE TO A BROOKLINE, MASS., RESIDENCE.

by the green of the rugged foliage, and even in the construction of the form work, so that the irregularities, both in the moulding and in the texture of the concrete, are clearly shown. The beauty of the entrance exists alone in the rugged simplicity and good proportions and strength of the posts and the surmounting cap.

There is illustrated in Fig. 9 a beautiful entrance to a residence in Brookline, Massachusetts, which shows the capabilities of using concrete as a fin-

from an artistic standpoint, is very desirable where the effort is to obtain the picturesque and artistic rather than the newness of lately completed work.

The possibilities of concrete have been realized in the construction of work in tropical and semi-tropical countries, and for these climates it is certainly an ideal material, on account of the bright skies and beauty of the sunlight and the sharp shadows which exist under such conditions. The approach shown in Fig. 10 is an entrance-way on the Island of Ber-

muda and is a very good example of monolithic concrete used in conjunction with moulded concrete blocks for wall construction.

As with the other illustrations, this shows how results are obtained by designing massive posts of simple design and grouping, and capped with simple mouldings, the effect being obtained by the grouping and the proportions of the work.

A good entrance of more pretentious design, but lacking in the beauty of

ing simply a straight wall with a V-shaped top and the posts have a simple cove moulding with fillet band and pendentive ornament with ball finial, being very effective and at the same time simple in construction and consistent with the material used.

Reinforced concrete is much used, both in gardens and terraces, and is extensively used in monolithic construction as walls, steps and balustrades, and is even cast in moulds in ornamental forms for seats, vases, pedestals and sun dials.



FIG. 10—MONOLITHIC CONCRETE ENTRANCE WAY ON THE ISLAND OF BERMUDA.

simplicity, is shown in Fig. 11. This illustration shows a gateway at Glenolden, Bermuda. The gate posts and wall are of monolithic construction, with some attempts at panelling, and illustrates what can be done with the material when care is exercised in the moulding and finishing.

A very attractive entrance, also constructed on the Island of Bermuda, is shown in Fig. 12. Here it will be noticed the wall and curb running into the posts are of more simple lines, be-

A very elaborate use of concrete in the garden is illustrated in Fig. 13, which shows a terrace surmounted with parapet walls and piers. The surface of the piers and walls is rough finished, of uniform texture, while the coping and caps are of smooth finish.

To the right of the figure is shown an open parapet with cast balustrades of ornamental design. The use of concrete benches and pedestals is also shown in this figure and illustrates how the more finished products in cement or concrete



FIG. 11—AN ENTRANCE GATEWAY—BERMUDA.



FIG. 12—AN ENTRANCE GATEWAY—BERMUDA.

act as an offset for the rougher and cruder work of more massive construction.

Two illustrations, showing the use of concrete in garden ornaments, as well, are illustrated in Figs. 14 and 15. In

application to elaboration of gardens and lawns, for forming pedestals for the support of vases and urns. Quite frequently this modern material is used for the support of some ancient or interesting vase or water jar, as illustrated in



FIG. 13—ELABORATE USE OF CONCRETE IN THE GARDEN

the former is illustrated the somewhat elaborate arrangement of benches and flower vases which can be reproduced at low cost on account of the fact that they are of one design and can be made in the same moulds.

Concrete has a great usefulness in its



FIG. 15—CONCRETE USED FOR GARDEN ORNAMENTS.

FIG. 14—CONCRETE USED FOR GARDEN ORNAMENTS.



FIG. 14—CONCRETE USED FOR GARDEN ORNAMENTS.

Fig. 16. In such instances a concrete pedestal is generally kept as plain as possible and is probably more consistently used as shown in Fig. 17, which illustrates a concrete pedestal supporting a Coquina stone water filter.

A rather pretentious and interesting



FIGS. 16, 17, 18 AND 19—CONCRETE
USED FOR GARDEN ORNAMENT.

piece of concrete garden ornament is shown in Fig. 18, which demonstrates that the roughness of the material only tends to the interest of the feature and allows it to be consistently used in conjunction with the vines and foliage, as shown in the illustration.

A beautiful piece of work in concrete, both as to proportions and finish, is shown in Fig. 19. This photograph illustrates a concrete drinking fountain for birds. The gracefulness of the design and the smoothness of the finish are interesting as an example of what can be done with concrete when care is exercised in the designing and in the manufacture of the article.

As an example of finely moulded work in concrete, of extremely elaborate design, it would be difficult to rival the assembly of features shown in Fig. 20.

This photograph shows a circular seat, supported upon elaborate pedestals with claw feet, backed by a screen of panelled work in concrete, made interesting by pedestal pilasters at intervals, supporting the overhang of the coping, the entire design being further strengthened by a circular pedestal supporting the concrete vase finely moulded with decorative design.

One of the most elaborate decorations for a formal garden is illustrated in Fig. 21, which shows a temple erected on the grounds of a private estate in Massachusetts. This beautiful piece of work is made possible by the use of concrete and is one of the few examples of the clean and sharp mouldings which can be obtained in concrete only with the exercise of the greatest care.



FIG. 20—EXAMPLE OF FINELY MOULDED WORK IN CONCRETE.

[EDITOR'S NOTE—Mr. M. M. Sloan began his series of four articles on "The Architectural Treatment of Concrete Structures" in the May, 1911, issue of THE ARCHITECTURAL RECORD. The second installment was published in August, 1911, and the third in November, 1911. The author has treated his subject under the Chapter Headings: I—Requirements for True Architectural Treatment; II—Surface Treatment; III—Decorative Treatment and Ornamental Design.]



FIG. 21—ELABORATE DECORATION
FOR A FORMAL GARDEN.



COLUMN OF ANTONINUS PIUS
IN THE VATICAN GARDEN.

FAMOUS ROMAN COURTYARDS

WORK OF THE GREAT ARCHITECTS OF THE RENAISSANCE

BY M. D. WALSH

THE GREAT ARCHITECTS of the Renaissance, who have left their indelible mark for all time on the history of architecture, surpassed themselves in their courtyard work in Rome, creating examples of purest Renaissance architecture designed in finest lines on Greek models, unspoilt by the decadence of later style, with its overflow of decoration. One of these, that "Prince of Renaissance architects," Bramante, not content with "writing his name in the heavens" in the matchless architecture of St. Peter's Dome, has left behind him, beside palace, dome and temple, many a stately courtyard, whose symmetry and grace would not discredit Athens at its best.

Some of these magnificent architectural works stand out prominently in the eyes of the world, where all can see and appreciate them, such as the "*Cortile di Belvedere*" and the "*Cortile di San Damaso*." Many more, however, not Bramante's alone, but works of his able pupils and successors, lie almost hidden within the gateways of historic palaces in the heart of old Rome, or in silent churches in narrow byways or green hillsides overlooking the city, where the lover of pure architecture seeks them out as he would a precious treasure, longing to carry the quietly-studied perfection of their simplicity into some of the florid architecture of the present day.

It is a pilgrimage dear to all lovers of Renaissance work, for no achievement, even the smallest, of the mighty idealist who, had he lived to complete it, would have made St. Peter's the marvel of architecture for all time, can be neglected by those who would seriously study his designs.

The "*Cortile di San Damaso*" and the "*Cortile di Belvedere*" are the best known specimens of Bramante's architecture—each in the Vatican, each alike forming backgrounds to the world's masterpieces of sculpture and painting; so that, side by side with the Greek sculptures and the "fine flower" of Renaissance art, embodied by Raffaelle in its highest degree, the name of one of the grandest, most vigorous and most ideal of Renaissance architects will go down to posterity.

The "*Cortile di San Damaso*" forms, so to speak, the "Roadway of Nations" on their way to audiences at the Vatican or in visiting many parts of the papal palace! On emerging from the staircase, the splendid courtyard bursts upon the eye almost as a surprise, strikingly impressive in the vastness of its cyclopean spaces, unspoilt by any extraneous object or ornamentation. These famous "Loggie" of Bramante once stood open, but for the preservation of the peerless frescoes of "Raffaelle" and "Giovanni da Udine" they were finally enclosed with glass.

Every detail of the architectural scheme makes for the central idea of vastness; the three tiers of slender flat columns, crowned by Doric, Ionic and Corinthian capitals, the perfect finish in both proportion and execution, enhanced by an almost Spartan simplicity of form, all tend to create a greater effect of space. Even those unappreciative of its architectural value come under the spell of the complete restfulness and harmony conveyed by the "*Cortile di San Damaso*" and its sunlit spaces, where the papal "gendarmes" in picturesque uniform, passing up and down

on sentry duty, look singularly insignificant and unimpressive. Fine as is its effect by day, the massive courtyard grows almost gigantic, seen at twilight or by night, when the spaces seem to recede into infinite vastness—the graceful curve of arch, the moulding of column appearing accentuated into a veritable vision of architectural symmetry, a nobly-dignified epitome of restrained power!

Widely different in both conception and design is Bramante's smaller masterpiece within the walls of the Vatican, the octagonal "*Cortile di Belvedere*." Simple in its lines, as are all his works, the graceful octagonal temple is wrought with a tender and loving care, fitting it for the gods of Greece which it worthily enshrines. Bound by the restrictions of space (for the court is small compared with the other massive courtyards in the Vatican Palace), Bramante knew how to make his tiny "*Belvedere*" a little gem of architecture, perfect in every point, from its columns with Doric and Ionic capitals, its ornamentation of "sarcophagi" and bas-reliefs, and the "Molossian hounds" guarding its entrances, to the fountain in the centre sending up jets of spray into the clear air against a sky deeper, bluer, by contrast, with the marble columns and friezes! It is like a bit of life-loving Greece, exiled amid the more sombre surroundings of the papal palace, showing the talent of the many-sided architect who could be stern to rigidity in some of his conceptions yet burst untrammelled into this joyous thing of brightness! How many of those who visit the "*Laocoon*," the "*Apollo Belvedere*," the "*Antinous*" and the "*Perseus*" realize how greatly their appreciation of these world-marvels is enhanced by their unique setting; how the gods one approaches by the "*Cortile di Belvedere*" seem more godlike, as passing from one to another of their niched recesses one pauses (overwhelmed, unconsciously perhaps, by their sovereign artistic beauty) to look out on the exquisite open-air court with its dome of sunlit sky and hear the soft purling of the fountain, where flags and lilies bloom under the water cascade.

Yet another specimen of Bramante's versatile genius is the palace courtyard, known as the "*Cortile della Pigna*" of the Vatican. Here again the restrained dignity of the architect, who scorned any effect made by a gorgeous wealth of decoration, shows itself prominently in this vast "*Cortile*" with its perspective of filled-in arches, divided by double sets of columns, crowned by Corinthian capitals. The second order of columns is identical with the first, while the lower end of the court forms a fine ellipse, surmounted by an open gallery.

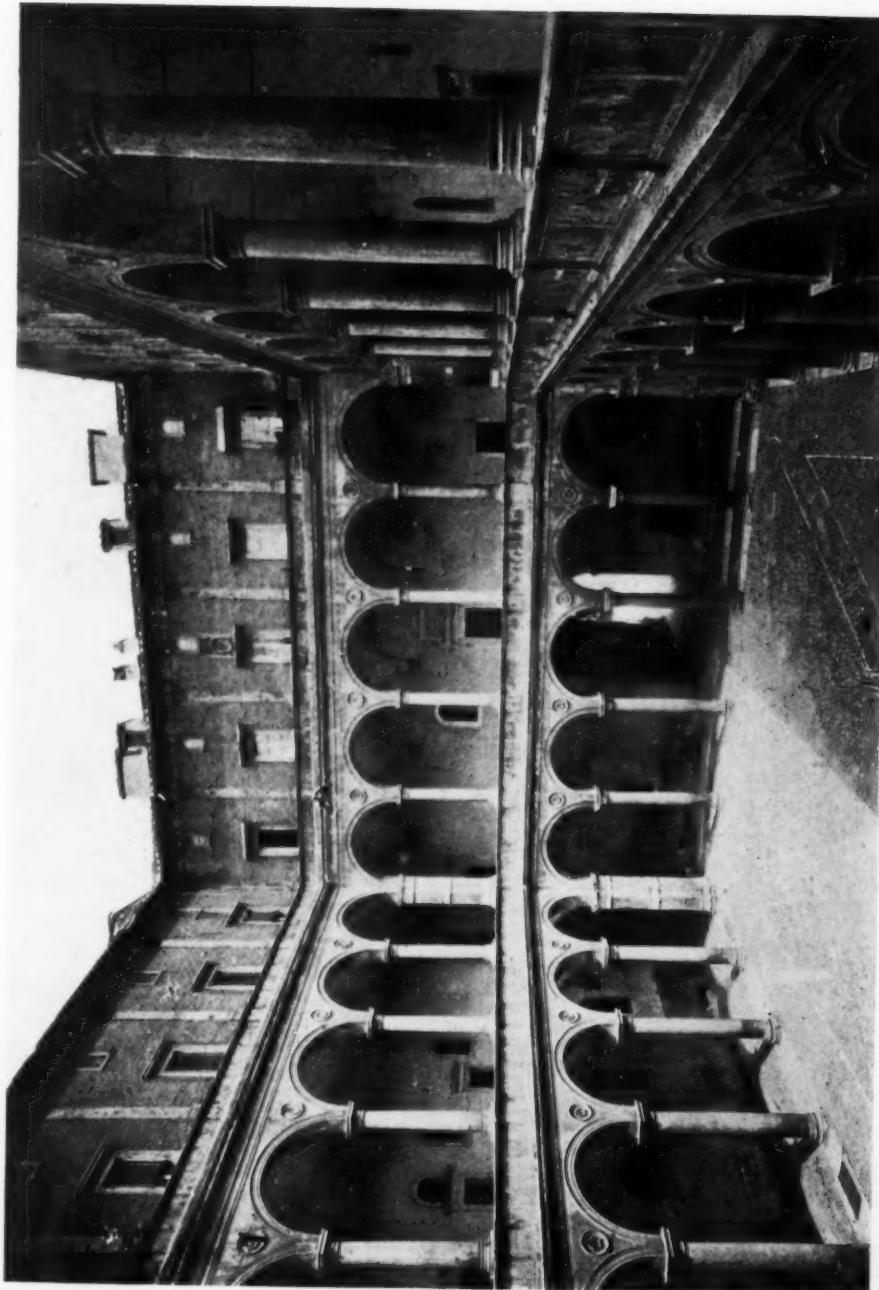
In Rome, however, even a Renaissance courtyard, no matter how conformable in architecture to the pure forms of Greece, cannot escape from the influence of the strange "personality" (if one may so express it) of the mighty Empire which lies iron-handed about every Roman structure, no matter what its date. Here, in the midst of Bramante's classic "*Cortile*" rises the pedestal of the column of "Antoninus Pius" and at the end, in the recessed niche of the ellipse, raised on a balustrade and steps, stands the curiously-striking "*Pigna*" or "Pine-cone" (from which the courtyard takes its name), flanked by the two bronze peacocks of splendid workmanship, which surmounted the Emperor Hadrian's Tomb on the "*Castel Sant' Angelo*." The colossal cone which once flaunted like a flaming beacon against the brightness of a Roman sky, crowning the Imperial Mausoleum by the river, seems like some captive giant here imprisoned within walls! Yet, strangely enough, there is a triumphant air about this group of antique sculpture. The great bronze "*Pigna*" glints golden still in the afternoon sunshine of the quiet garden court, while the bronze peacocks, with outspread feathers, guard it proudly yet as they guarded the Emperor's tomb. They were placed here with the consummate skill for value possessed only by a genius, for, instead of detracting from the architectural scheme, they marvellously enhance its effect of solidity and power, as any lighter ornament or decoration, even of supreme sculptural excellence, would have changed the aspect of its massive



CORTILO DI PALAZZO FARNESE.
ROME, ITALY.



CORTILE OF SANTA MARIA DELLA PACE,
ROME,
ITALY.



CORTILE OF CANCELLERIA PALACE,
ROME,
ITALY.

proportions. A Venus, a Dancing Satyr, or a Greek vase, for instance, could not but strike a discordant note in this "Giardino della Pigna," just as Hadrian's colossal emblems of immortality would jar the eye, seen in the octagonal "Cortile di Belvedere." Far different a setting to the majestic Vatican enshrines another of Bramante's famous courtyards—a tiny treasure which hides among the devious and narrow thoroughfares of the "vanishing Rome," whose picturesqueness is slowly but surely fading under the hand of the ruthless "modernizer." As if jealous to guard her art treasures from the carelessly unseeing eye of the intruder, the church of "Santa Maria della Pace" (Our Lady of Peace), with its curiously curved and columned portal, stands in a narrow byway behind a network of winding streets. Here, as in the "Cortile di San Damaso" in the Vatican, two great lights of the Renaissance meet again, but in this case Bramante's work does not form a setting for Raffaelle's dreams of splendid color.

The small shrine which holds a wealth of art and sculptural beauty is not the goal of our architectural pilgrimage today, nor even the quiet chapel where Raffaelle's "Sybils" make a perpetual glory, as of sunshine, in the dark and sombre church. Beyond the church, within the monastery precincts, Bramante built his exquisite little courtyard or cloister. True to his traditions of sublime simplicity, "Summa ars est celare artem," the "Master-builder of palaces" stooped to lavish patient skill and ideal excellence on this smallest child of his fancy, till it stands out like a little Greek temple, clear-cut, classic, bordering on the severe, perhaps, critics might judge it, for its size, yet with a grace which owes nothing to decoration, everything to line. The arches of the cloister spring from flat columns, upon which are superimposed graceful columns with Doric base and Ionic capitals. These, in turn, support an open gallery whose columns are flat and rounded alternately. The original design is the essence of graceful proportion—the slender pillars of the rounded columns above the arches

posed upon their Doric base with surprising lightness and splendidly alternating with the flat columns, crowned by Corinthian capitals.

This courtyard of "Santa Maria della Pace" was a work of Bramante's later years, when his spurs had been won in many a field, but it shows no sign of a falling off in power, for his genius, not content with reproduction, even of original forms, continued to create to the end.

Only a short distance from "Santa Maria della Pace" stands a better known monument of the architect's sovereign skill, the "*Palazzo della Cancelleria*" or "Chancellor's Palace." It is perhaps the most splendid palace Bramante ever built, with a noblest courtyard, second to none of his masterpieces.

As in the Vatican courtyards no space restrictions hampered the architectural scheme. His marked predilection for the purely classic, the majestic, was given full play and to his hand came antique columns fit to support the massive structure which not even a Roman Emperor could have scorned as unworthy an imperial residence. The "Theatre of Pompey" stood not far from the site of the present "Cancelleria Palace," and its magnificent granite columns were used in the adjoining church dedicated to St. Lawrence. Many centuries later, when Cardinal Riario rebuilt the church, entrusting the designs for both church and the adjoining palace to Bramante, the architect transferred the columns from the church to the palace courtyard—a royal beginning for a structure which was to rank among the veritable triumphs of Renaissance architecture. The effect of this courtyard is truly imposing—lighter in design than the "Cortile di San Damaso," perhaps, but intensely noble in form and proportions. Two tiers of magnificent arches spring from rounded columns with Doric capitals, while the third order, closed, shows a series of massive flat columns, crowned with Corinthian capitals.

The capitals of the columns from Pompey's Theatre have been added by Bramante, their chastely severe and simple ornamentations, consisting of

separate designs of roses, coils and acanthus leaves, blending marvellously into the monumental severity of the ponderous antique columns, while yet adding a touch of grace to the rigidly classic design. Circular medallions, each with a rose in its centre, are carved in bas-relief above every column in the two lower stories. Strange as it may seem, taken in conjunction with granite antique columns, supporting a structure of travertine, taken from the huge blocks of the Colosseum, the rose decoration seems to fit in with the general harmoniousness of the architectural scheme! Nevertheless, one is tempted to marvel how Bramante placed them there—the architect who absolutely worshipped the classic grace of line almost to the exclusion of all ornament, whose virility scorned decoration as effeminate. Even in the days of the Renaissance, however, the great painters and architects were forced to make concessions to the wishes of powerful employers. It would appear that in the coat-of-arms of Cardinal Riario a *rose* appears in the armorial bearings; hence, travertine and granite must needs bloom, into *unwilling* roses, perhaps, under the hands of the classicist architect, so that the escutcheon of the "Cardinal of the Roses" might go down to posterity indelibly engraved on the walls of his mighty palace.

Another great specimen of Bramante's courtyard work in Rome, of peculiar interest to us, is left in the "Cortile" of the "English Palace," or rather, the "*Palazzo Giraud Torlonia*"—that massive old structure out in the former "Burgus Saxonum" near St. Peter's, which, with its great blocks of travertine, seems more fortress than palace. It was presented to the sovereigns of England in the sixteenth century as a residence for the English ambassadors, and Cardinal Campeggi, the papal legate to Henry VIII. resided in it for some time.

The characteristic note of Bramante's architecture—solid strength and pure outline—is markedly apparent in the courtyard of the "English Palace," with its fine, unimpaired vista of Doric columns, its splendid proportions. It con-

tains many interesting architectural details, but time forbids one to linger unduly in a pilgrimage to Rome's many classic courtyards. Ample leisure is needed to see and admire them all. For instance, there is Baldassare Peruzzi's exquisite little flowery courtyard in the "*Palazzo Attends*" or his sombrely beautiful "Cortile" of the dark "*Palazzo Massimo alle Colonne*," both equally deserving of careful study, as grand examples of pure Renaissance. Peruzzi's graceful genius loved to create a palace, classic yet fairy-like in beauty of ornament. He revelled in grace and lightness. Indeed, one tends, in a certain sense, to compare his genius, his intense love of the gracious and the beautiful, to that of Raffaelle, as instinctively one likens the genius of Bramante to Michelangelo. To these two great Florentines the sombre side of life predominated. Even in their art, their imagination ever sought the perfection of form and symmetry, unadorned almost to bluntness by the minor adjuncts of decoration. Now Raffaelle and Peruzzi sacrificed no line of perfection for the decorative. They, too, were steeped in the cult of classic symmetry and peerless proportion; but their natures were cast in a less rugged mould, and their personality overflowed into their work, softening the outlines with their own love of life and beauty and youth.

We cannot pass by without a glimpse into the grand "Cortile" of the "*Palazzo Farnese*," where Sangallo raised his superb colonnade, a fitting entrance to one of the greatest, if not *the* greatest, of Roman palaces, which, apart from the treasures of art it once contained, is a triumph of Renaissance architecture—gorgeous and imposing even for that halcyon age—built by princes for princes, for Michelangelo himself took up Sangallo's work on his death, leaving it with the hall-mark of the personality which made everything he touched (not even of his own beginning) so utterly *his own*—not so *perfect*, perhaps, as the ideal of its creator, yet *more* original.

Another regal courtyard is that of the "*Palazzo Borghese*," an example of

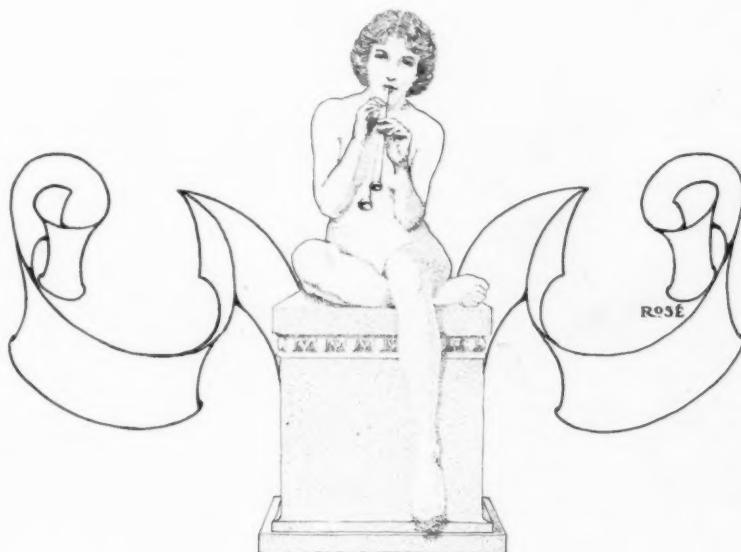


DETAIL OR ORNAMENTATION—COLUMN OF
"THEATRE OF POMPEY" IN CORTILE DEL
CANCELLERIA PALACE, ROME, ITALY.

later Renaissance architecture widely differing in effect to Bramante's vast spaces and splendid perspectives. While the architectural scheme, the work of Lunghi and Flaminio Poncino, is grandiose to a degree, with two noble tiers of arches springing from massive groups of columns, the almost colossal statues and sculptural fragments seem to unduly crowd the spaces between the arches. Contemplating the effect of the court as a whole, it appears, in a way, though its proportions are undeniably fine, as if such colossal arches, statues and columns needed a greater vastness of perspective to give them their full architectural value. The power and intensity of the purer Renaissance had already been touched with the shadow of decadence which was to sap its force in ceding to that feeling for the ornate, the over-abundance of even fine and massive work, which took away from the grand simplicity of the first great masters.

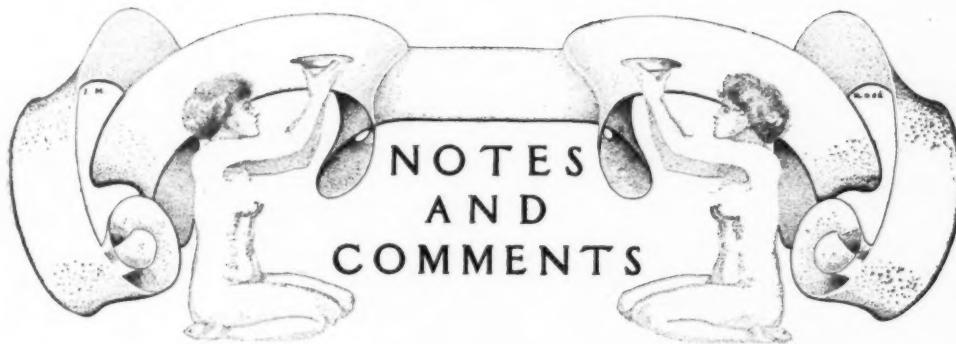
Nevertheless, many a splendid courtyard, even of the latter Renaissance, is well worth attention in the palaces of Rome. One who loves the study of architecture can find matter for endless interest in the Roman courtyards, for, beside these few examples—mostly of the finest epoch of the Renaissance—there are countless more, some mediæval, some of later date, but few that do not possess either striking beauty of outline or peculiar suitability of decoration.

Above all, the courtyards of Rome have a curious attraction altogether their own, not only from their architecture or associations, not even from the twin interests of the classic and historic from the mingling, perhaps, of all these causes: the Roman atmosphere which surrounds them (to which sky and light give a greater value), the purely classic beauty, the romance of history, and the names of the masters whose personality still lives in their great creations, intensely charged with vitality.





ENTRANCE DETAIL—"JOURNEY'S END."
House of Mr. Hayden, Lexington, Mass.



TWO INTERESTING PROJECTS.

Two city improvement projects, costly, daring, but with unusual practical merit to commend them, have been brought forward in the last few weeks by architects. One of them is the scheme of Henry Rutgers Marshall for a new avenue to afford more direct connection between the Grand Central and the Pennsylvania stations in New York. By starting it at Fifth Avenue and Fortieth Street, giving to it a long, slight and handsome curve, and bringing it into Seventh Avenue just below Thirty-fourth Street, he succeeds in avoiding any buildings of prohibitive value. The avenue traverses a region which has thus far been little developed, only two modern structures, indeed, standing in its way. One of these is the Knox building at Fifth Avenue and Fortieth Street, where it starts, and the other a nine-story building, only forty feet wide, near the corner of Thirty-seventh Street and Sixth Avenue. Of the other structures that would have to be acquired, hardly any are more than four stories in height. On the other hand, the avenue would certainly develop, as Mr. Marshall points out, a large amount of property that now yields little in taxes to the city. As one studies its location, it becomes evident that it would almost surely become a great shopping street. Of the artistic features, Mr. Marshall says: "From Fifth Avenue the vista down the new curved avenue would not be unlike that of Piccadilly in London; and sites upon it would certainly be sought by wealthy merchants who could afford to

house themselves amidst fine architectural surroundings. The juncture of the new avenue and Broadway might be made a center of interest, and on the whole of the street southwest of that point a splendid view of the new Pennsylvania Railroad station would be gained." The opportunity to get that is certainly one of the great architectural needs of the city to-day. Incidents of the plan are the creation of a plaza in front of the new Library and the widening of Fortieth Street from Fifth Avenue to Park. Without doing the latter, the cost of the land and buildings to be acquired has been officially estimated at about fourteen millions; but it is undeniable that the avenue would be of extraordinary convenience and that it would create large values. The other project to which reference was made has been brought forward by J. R. White, of Niagara Falls. It contemplates the building of a new Union Station at Third and Falls Streets; the erection of a city and convention hall on the site of the New York Central's present station; the elimination of a number of exceptionally dangerous and annoying grade crossings and the construction of a scenic boulevard along the riverbank, connecting the north and south ends of the greater city, formerly the villages of Niagara Falls and Suspension Bridge. The trains would back into the new station and would journey from one end of the city to the other by the right-of-way acquired some years since for a railroad that was never built. It is interesting to reflect that one can hardly think of two city improvement projects in America that would be seen and appreciated by a greater number of different people than would these.

**CONTRASTED
REPORTS.**

In "The Future Extension of the Suburbs of Sheffield," a large quarto, illustrated with maps and with diagrams showing cross section street developments, there is offered a good example of the attitude which is taken toward town planning by the architectural profession in England. For this carefully developed project, which contains not so much as a hint of architectural bias or origin, is in reality the reprint of a lecture delivered before the Sheffield Society of Architects and Surveyors by Edward M. Gibbs, F. R. I. B. A. Published in a form similar to that in which several American city plan reports have been issued, it offers, also, an interesting basis of comparison between the work in the two countries. For instance, the plans for Sheffield and those for Rochester, Los Angeles and Grand Rapids are issued in quartos which on the outside look almost exactly alike, the advantage in neatness, paper, and general attractiveness being, however, with the more expensive American reports. Within, the latter are full of pictures, many of them photographs, but many also drawings, wonderfully cleverly done, showing—perspectively and prospectively—architectural compositions of great attractiveness. There are shown, too, maps and diagrams that are of great interest and merit, as examples of draughtsmanship at least; and though of the five different men concerned in the preparation of these American reports only two were architects, the emphasis is overwhelmingly on the creation of the architectural city beautiful. In the English report, written entirely by an architect, there are tables showing population and area growth; there are but five photographs, and these are of streets; the cross section diagrams might all have been made in the office of a city engineer; and of the five large folded maps, four are topographical, and crudely and unattractively done, and presented in black and white. The fifth is a simple line drawing suggesting a plan of model convenience for a city situated on a plain. Neither in illustrations or text is there suggestion of architectural composition. The country around Sheffield is exceedingly rugged, and the whole discussion has to do with contours, with engineering details, and with housing. Park reservations are referred to, but briefly. The report considers much more fundamental matters than do the American reports. There is nothing about it which is

spectacular, or even popularly attractive. It deals only with the planning of streets and the subdivision of property—matters which in America we have need of taking up a great deal more than we do. In part, the difference results, no doubt, from the fact that the Sheffield report deals with the outskirts of the city, and not at all with the built up portions. Yet there remains the remarkable contrast, which is the more striking when it is realized that the Sheffield report, which does not touch upon architecture, was wholly written by an architect, and primarily for architects; while the American reports, a majority of whose writers were not architects, place their emphasis so strongly on architectural development, even to the slighting of some fundamental considerations. Town planning in England and city planning in America—a difference in term for the same thing which is of itself significant—are still greatly unlike. Each has something to learn from the other; and both will be better as they grow to be more alike.

**AN
OBJECT
LESSON.**

When Mayor Magee of Pittsburgh recently signed the ordinance authorizing the removal of the Hump—that hill which has long confined the business section of Pittsburgh—a news note stated that plans were immediately announced for skyscrapers of a total value of \$100,000,000 to be erected on the partially leveled ground. One was to be a monster hotel; another, a twenty-story office building, and so the list went on. It offered a curious commentary on American ideas of urban expansion. No one seemed to think of business suddenly spreading out, to flow in thin stream over a large space. The idea was inch by inch progression, the ground put to just as intensive use as if insurmountable barriers still hemmed it in. What, after all, did the business section actually gain? Might it not, from a congestion standpoint—congestion of traffic, with all the expense and loss which that involves, as well as congestion of human beings—have been a little better for Pittsburgh if, the Hump remaining, a secondary business center had been developed? For, of course, though all hills were leveled, there still would be the barriers of time and distance to crowd business toward the center, to restrain its rapid outward movement, to force intensive use of land, unless some legislative restriction on

the height of buildings should give artificial stimulus to its movement. The idea of expansion illustrated is American because American city ordinances so rarely provide that stimulus. A striking object lesson is offered by the event.

**CITY
PLANNING
IN
LIVERPOOL.**

City planning improvements in Liverpool are usually associated with the waterfront developments and with housing improvements, but Liverpool has not been overlooking the spectacular and grandiose effects of modern city planning. A thoroughfare that varies in width from eighty-four to one hundred and eight feet has been constructed around the city in a rough semi-circle, so as to enclose the city on all but the river side. Now practically completed, it is about seven miles in length, and is situated from three to four miles from the center of the city. Intersecting at various points are radial roads leading out to other towns or outlying sections. Some of these are as much as one hundred and fourteen feet in width. Car tracks are laid on many of them, and many of them are beautified with wide grass margins and plantations of shrubbery. These broad streets have been secured by requiring the landowners to give without cost street width to the amount of sixty feet, this being the by-law requirement. Then the city purchases the strips required for the additional width.

**WANTED,
A DA VINCI.**

"If Da Vinci Came to Town" is the suggestive title of a sketchy note which Ernest Thompson Seton has contributed to *The American City*. It begins with a protest against classicism, on the ground that if Leonardo "had to design a bridge, a cathedral, or a spoon," he would not have gone "to the library to try to find out how the ancient Greeks did it. . . . It is very sure Da Vinci would have accepted modern life in modern shape, but would have helped by the touch of his genius." The second point of the article is thus expressed: "Of all the ugliness of our modern towns the least justifiable is the ugliness of their color. There is no reason, economic, climatic, or geographic, why New York should not be as beautiful in color as Venice. . . . Of all the defects, that of color is the easiest to remove, and of all it is the

last thought of, no doubt partly because the ancient Greek color is lost, and partly because of the low standards of taste that prevailed in the century just closed. . . . There are few safer, better colors than good brick, and yet even this must be hidden in a coat of most atrocious red paint. There are plenty of good colored slates, yet the only unpleasant one, the leaden gray, is the accepted style."

He claims that not a single building in New York has lost its color through soot or dirt, though often colors have been subdued or veiled, and sometimes improved, by the "bloom of time." He believes that ultimately public good taste would be a guarantee against vulgarity in color, and that meanwhile a sufficient safeguard would be construction with colored materials. He thinks the "great companies" would be willing to pay for beauty. "They might put decorative telegraph poles on their roads for the same reasons that they put onyx pillars in their stations."

**PALACE
AND
GARDEN.**

While New York—where city life has been always a moving picture—has been resigning itself to the passing of the Madison Square Garden, London has been agitated by the threatened loss of the Crystal Palace. But the Palace, which was opened to the public nearly sixty years ago, and has been visited by not less than 100,000,000 people if the weary turnstiles may be trusted, is a good deal older institution than Madison Square Garden and has a stronger hold on the popular heart. So the threatened loss was regarded as something like a public tragedy; and when the auctioneers announced that the sale would take place on November 29 and issued a catalogue of the immense building and its contents, the Lord Mayor convened a meeting at the Mansion House itself of "all bodies and persons interested in the acquisition of the Palace and its grounds for the use of the public forever." It was stated that five million dollars would save the building, and several thousand pounds were pretty promptly subscribed. But the sum was a big one to raise in a month's time, with no very definite plan agreed upon for the future of the institution and indecision as to whether or not the building could be suitably regarded as a public memorial to the late King Edward. With a sigh of relief, therefore, England read one November morning that the Earl of Plymouth had purchased the Crystal Pal-

ace and would hold it until the national fund should be able to take it off his hands. By such occasional acts as this the privileged class almost justifies its existence, though one may wonder whether some of our own rich men might not have risen to the like opportunity, had there been a correspondingly popular expression of the wish—undoubtedly widespread—to save Madison Square Garden. Picturesqueness and beauty are all in favor of the Garden, as also is convenience of location, while educational value and ministrations to popular social and moral needs—in which the Palace has had the advantage—were mere incidentals that could be easily provided under another management. It is interesting to note, too, that the Palace, for all its popularity, has not been a financial success for more than forty years. But in one respect, its location has given to the Palace a great advantage over the Garden. For while the "Garden" is really only a building, the "Palace" plant includes a park of 200 acres, adorned with great fountains and opportunities for out-of-door sport of various kinds. History says that when the central building was constructed there was the opposition and criticism that great projects nearly always evoke. It was said that the first strong gale would blow it down; that the heat of the sun, focused through the countless glass panes, would grill to death all who stayed inside; and that, failing that untoward circumstance, the plague was sure to ensue from the confluence of such vast multitudes as such a building would harbor.

**TOWN
PLANNING IN
FRANCE.**

The cities in this country which have made such a stir about getting "city plans" and adopting a program of improvement to last over a term of years, in order that each may

be "the Paris of America," will do well to study the new improvement project to which Paris has now, with no great fuss, committed herself. This contemplates the expenditure of \$180,000,000 on municipal improvements, the expenditures to be spread over a period of fifteen to eighteen years, and to be met by the issue of municipal loan stock. School additions and improvements are to take one-tenth of the sum; hospitals, \$7,000,000; new construction connected with the water supply, \$25,000,000; street work, \$9,000,000; the fight against tuberculosis, \$6,000,000; public buildings, \$5,000,000; and squares and gardens, \$3,000,000, while the great sum of \$86,-

000,000 is set aside for what we call city-planning work, to be used in the creation or extension of traffic arteries, etc. With all the talk about the town-planning act of Great Britain, the fact has been almost overlooked that France has its counterpart in the passage of the Beauquier town extension bill. This bill provides that within five years from the date of its passage each urban district containing ten thousand or more inhabitants shall prepare a plan for its improvement and extension. This shall "determine the position of public squares, gardens, parks and open spaces; shall fix the width of roads, their direction, the manner of constructing the houses, and, in general, shall establish the proper development of the town on hygienic and artistic lines." The plan must be approved by the department Bureau of Hygiene and by the commission for the preservation of sites and places of natural beauty or historic interest. The plan must also be subject for a year to public criticism and objection before the Council of State shall authorize its adoption. Once adopted, it is to remain in operation for 30 years, when it is to be renewed, and during all this period extensions and improvements must be made in accordance with it.

**COMPETITION
FOR
AUSTRALIA'S
CAPITOL.**

Copies have been received in this country of the official invitation to participate in the competition for the planning of the new capital city of Australia. The invitation, which comes from the Minister for Home Affairs for the Commonwealth of Australia, at Melbourne, states that there will be three prizes. The first carries a premium of \$8,750; the second a premium of \$3,750, and the third a premium of \$2,500. To assist the competitors in the preparation of their plans information is given under the headings: "Historical and Introductory," "Requirements," "Description." Further information may also be obtained by addressing the proper authorities. The data given includes not only historical notes, but statistics relating to meteorology and climatology, complete contour maps of the section of country immediately concerned, and topographical maps of nine hundred square miles of federal territory, maps showing rainfall, temperature statistics, reproductions of landscape sketches, etc. The structures for which sites must be provided include the Parliament House, the residences of the governor general and prime minister, public

offices for each of the various departments of government, courts of justice, places of public worship, a national art gallery and library, university, technical college, city hall, general post office, museum, railway station and freight yards, military barracks, hospitals, national theatre, central power station, gas works, markets, stadium, parks, public gardens, etc. The competition is international in every sense. It is promised that the prizes will be awarded within two months from the date of the receipt of the designs. All designs submitted are to be exhibited in Melbourne for a reasonable period. Thereafter the competitors may, if they desire, arrange on their own behalf a second exhibition to be held in London or elsewhere.

**PROCEEDINGS
OF CITY
PLANNING
CONFERENCE.**

those of the Second Conference. The papers are given in full; but the discussions, both prepared and extemporaneous, have wisely been shortened to the extent of eliminating repetitions. The list of subjects considered in the numerous papers, if somewhat formidable in extent, is replete with interest. Their authors include not only most of the men who are prominent in this country in the city planning movement, but also three Englishmen: Raymond Unwin, Thomas H. Mawson and Thomas Adams. The book, which may be purchased from the Secretary of the National Conference, Flavel Shurtleff, 19 Congress Street, Boston, while necessarily lacking homogeneity—as all convention proceedings do—is yet a valuable addition to the slowly growing literature of a very broad and very interesting subject.

**ARCHITECT
AND
ENGINEER.**

on construction are invariably of that class termed practical, assuming a thorough knowledge of elementary mathematics and some understanding of the principles of statistical mechanics, physics and the constitution of building materials—which is, of

The Proceedings of the Third National Conference on City Planning, which was held in Philadelphia last May, have now been issued in a dignified volume, uniform in style with

course, too broad an assumption, as the architects themselves will doubtless admit. For those who have been able to keep up their schooling in engineering, such books answer, in a way, the needs of every-day practice. The profession at large, however, remains, to a considerable extent, ignorant of and uninterested in the art of engineering as it concerns the constitution of buildings. On the whole, the art of engineering remains for the American architect merely an intricate process of competition, which must occasionally be tolerated, but which can generally be supplied by the draftsman who knows how to use the tables in the construction hand-books. Herein lies the cause for a regrettable lack of sympathy between architect and engineer, a circumstance more potent than any we know to work to the detriment of both architectural and engineering work.

If only the architect were a little more of an engineer and the engineer a little more of an architect, what opportunities would be created for mutual help and progress!

**SECTIONAL
TOWN
PLANNING
CONFERENCE.**

From the headquarters of the Los Angeles 1910 Movement and Municipal Reference Bureau, comes a prospectus of the first Southwest city planning conference. It is announced to be held in Los Angeles in November. "In the Southwest it is possible to develop," says the prospectus, "a distinctive type of city. We love the open air and sunshine, the broad spaces, the flowers and fruits, and mission style of architecture. The closely built up city is not to our liking." To promote the planning of this indigenous type of town, the city planning conference for that section has been proposed. There are to be sessions covering three days and an exhibit. The experiment will be watched with interest. It is to be tried under good auspices, and the idea of sectional city planning conferences has much to commend it. The town planning problems in old New England, for example, are quite unlike those of the new cities on the Western plains or those of the South Atlantic seaboard; and while, on the one hand, it is true that no two cities are alike, and on the other, that there are enough problems common to all to justify an occasional national, or even international, gathering, yet the sectional conference, where may be discussed the problems of a like environment, would seem to have special opportunities for helpfulness.

Among the numerous books on building construction we have yet to find one which presents the subject in a way entirely intelligible and helpful to the architect. Our books

Credit was given, in the November Number, to Butler & Rodman, architects, for a house at No. 13 East 77th Street, New York City. This was unjustly insufficient, for the name of Mr. E. R. Bossange should have appeared as an associate architect.

Credit should be given Messrs. Wurts Brothers for the photographs used to illustrate the "Portfolio of Current Architecture" published in the December issue of The Architectural Record.

The Building Committee of the Perry Memorial announces a competition for the selection of an architect for the memorial which will be erected at Put-in-Bay, South Bass Island, Lake Erie, near the place where Perry's victorious action was fought. The memorial will commemorate not only the victory but the subsequent one hundred years of peace between the United States and Great Britain.

It will consist of a lofty commemorative monument with a museum of historic relics

at its base standing in a reservation of fourteen acres. Six hundred thousand dollars will be expended upon the construction of the monument and museum. The reservation will be designed as a suitable setting for the memorial.

The program, which conforms to the principles approved by the American Institute of Architects has been so drawn under the direction of the committee and Mr. Frank Miles Day adviser to the committee, that the problem presented is a most attractive one. Competitors will have the fullest scope for their artistic imagination. The prize of the competition will be the appointment as architect to design and superintend the construction of the memorial. There are also to be three premiums for the authors of the designs placed next to the winner.

The Building Committee will be advised in making its award by a jury of well known experts.

Architects desiring a copy of the program which sets forth the conditions of participation, should make application to Mr. Webster P. Huntington Secretary to the Building Committee, Federal Building, Cleveland, Ohio.

